

MESSAGE PROCESSING METHOD AND SYSTEM**Publication number:** JP9223087 (A)**Publication date:** 1997-08-26**Inventor(s):** FUKUYAMA NORIYUKI; MURAKAMI MASAHIKO; OKADA SUMIYO; IWAIO TADASHIGE; MORINAGA MASANOBU; ONOGAWA HIROYUKI; HASEGAWA HIROMI**Applicant(s):** FUJITSU LTD**Classification:**

- international: G06F13/00; G05B15/02; H04L12/54; H04L12/58; G06F13/00; G05B15/02; H04L12/54; H04L12/58; (IPC1-7): G06F13/00; G05B15/02; H04L12/54; H04L12/58

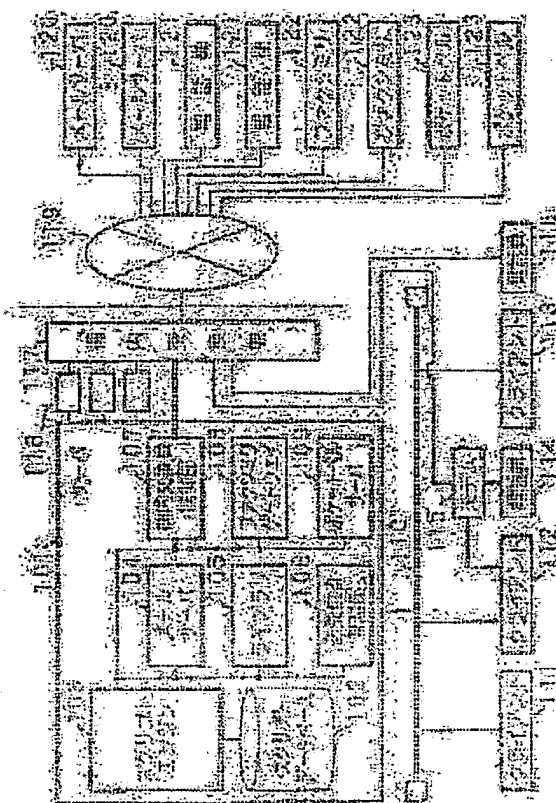
- European:

Application number: JP19960256834 19960927**Priority number(s):** JP19960256834 19960927; JP19950321863 19951211**Also published as:**

JP3380884 (B2)

Abstract of JP 9223087 (A)

PROBLEM TO BE SOLVED: To eliminate such troublesomeness that is caused by the unnecessary incoming notification by setting previously the comparison condition corresponding to the due processing for selection of the processing that is carried out by a received message and then carrying out the processing corresponding to the comparison condition when the received message is coincident with the comparison condition. **SOLUTION:** The correspondence is previously set on a script data base 102 of a server 101 for every receiving device between the processing to be carried out and the execution condition of the processing set based on the contents of a received message or the receiving state of the message.; A script engine 103 identifies the receiving device of the message when it is received and judges whether the contents of the received message or the message receiving state is coincident with the execution condition set at the identified receiving device. If the coincidence is judged, the processing corresponding to the execution condition is carried out. Thus, the processing is carried out only when the received message is coincident with the execution condition.



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【特許請求の範囲】

【請求項1】 受信装置を指定したメッセージの受信に応じて、予め設定してある処理を実行する方法において、

受信装置毎に、実行すべき処理と受信メッセージの内容又はメッセージの受信状況に基づく前記処理の実行条件とを対応付けて予め設定しておき、前記メッセージを受信したとき、該メッセージの受信装置を識別し、受信メッセージの内容又はメッセージの受信状況が識別された受信装置に設定してある実行条件に合致するか否かを判別し、合致すると判別した場合にその実行条件に対応付けてある処理を実行することを特徴とするメッセージ処理方法。

【請求項2】 受信装置を指定したメッセージの受信に応じて、予め設定した処理を実行する方法において、受信装置毎に、実行すべき処理とキーワードとを対応付けて予め設定しておき、メッセージを受信したとき、該メッセージの受信装置を識別し、識別された受信装置に設定してあるキーワードが前記メッセージに含まれるか否かを判別し、含まれると判別した場合にそのキーワードに対応付けてある処理を実行することを特徴とするメッセージ処理方法。

【請求項3】 受信装置を指定したメッセージの受信に応じて、予め設定した処理を実行する方法において、受信装置毎に、実行すべき処理と時間帯とを対応付けて予め設定しておき、メッセージを受信したとき、該メッセージの受信時刻を判定し、該メッセージの受信装置を識別して、識別された受信装置に設定してある前記受信時刻が属する時間帯に対応付けて設定してある処理を実行することを特徴とするメッセージ処理方法。

【請求項4】 サーバを指定した電子メールの受信に応じて、予め設定してある処理を実行する方法において、サーバ毎に、実行すべき処理と受信電子メールの内容又は電子メールの受信状況に基づく前記処理の実行条件とを対応付けて予め設定しておき、前記電子メールを受信したとき、該電子メールを受信したサーバを識別し、受信電子メールの内容又は電子メールの受信状況が識別されたサーバに設定してある実行条件に合致するか否かを判別し、合致すると判別した場合にその実行条件に対応付けてある処理を実行することを特徴とする電子メール処理方法。

【請求項5】 複数の受信装置と接続してあり、前記受信装置毎に実行すべき処理を予め設定しておき、通信網から入力された受信装置を指定したメッセージの受信に応じて予め設定した処理を実行するメッセージ処理システムにおいて、

受信装置毎に、実行すべき処理と受信メッセージの内容又はメッセージの受信状況に基づく前記処理の実行条件とを対応付けて記憶しておく書換え可能な記憶手段と、受信メッセージに指定してある受信装置を識別する手段

と、

受信メッセージの内容又はメッセージの受信状況が識別された受信装置に対応付けて前記記憶手段に記憶してある実行条件に合致するか否かを判別する手段と、合致すると判別した場合にその実行条件に対応付けてある処理を実行する手段とを備えることを特徴とするメッセージ処理システム。

【請求項6】 複数の受信装置と接続してあり、前記受信装置毎に実行すべき処理を予め設定しておき、通信網から入力された受信装置を指定したメッセージの受信に応じて予め設定した処理を実行するメッセージ処理システムにおいて、

受信装置毎に、実行すべき処理とキーワードとを対応付けて記憶しておく書換え可能な記憶手段と、受信メッセージに指定してある受信装置を識別する手段と、

識別された受信装置に対応付けて前記記憶手段に記憶してあるキーワードが前記メッセージに含まれるか否かを判別する手段と、

含まれると判別した場合にそのキーワードに対応付けてある処理を実行する手段とを備えることを特徴とするメッセージ処理システム。

【請求項7】 複数の受信装置と接続してあり、前記受信装置毎に実行すべき処理を予め設定しておき、通信網から入力された受信装置を指定したメッセージの受信に応じて予め設定した処理を実行するメッセージ処理システムにおいて、

受信装置毎に、実行すべき処理と時間帯とを対応付けて記憶しておく書換え可能な記憶手段と、

メッセージの受信時刻を判定する手段と、

受信メッセージに指定してある受信装置を識別する手段と、

識別された受信装置に対応付けて前記記憶手段に記憶してある、前記受信時刻が属する時間帯を識別する手段と、

識別した時間帯に対応付けてある処理を実行する手段とを備えることを特徴とするメッセージ処理システム。

【請求項8】 複数のサーバと接続してあり、前記サーバ毎に実行すべき処理を予め設定しておき、通信網から入力されたサーバを指定した電子メールの受信に応じて予め設定した処理を実行する電子メール処理システムにおいて、

サーバ毎に、実行すべき処理と受信電子メールの内容又は電子メールの受信状況に基づく前記処理の実行条件とを対応付けて記憶しておく書換え可能な記憶手段と、

受信電子メールに指定してあるサーバを識別する手段と、

と、

受信電子メールの内容又は電子メールの受信状況が識別されたサーバに対応付けて前記記憶手段に記憶してある実行条件に合致するか否かを判別する手段と、

合致すると判別した場合にその実行条件に対応付けてある処理を実行する手段とを備えることを特徴とする電子メール処理システム。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、公衆電話網を介して外部の情報伝達手段とネットワーク接続してあるコンピュータが受信したメッセージに応じて処理を選択し実行するメッセージ処理方法及び該方法の実施に使用するメッセージ処理システムに関する。

【0002】

【従来の技術及び発明が解決しようとする課題】情報伝達手段として電話機、ファクシミリ、ポケットベルがある。近年、ある目的のためにこれらの情報伝達手段を組合せ、連携して作動させることによって新しい機能効果を発揮する装置が知られている。例えば、留守番電話機であって、ポケットベルと組合わせ、メッセージを録音したことをポケットベルへ通知する機能を有する電話機がその一例である。この電話機には通知機能の使用に先立って通知先のポケットベルの番号を予め設定しておく。そしてこの電話機は留守番機能によりメッセージを録音したとき、予め設定してある番号のポケットベルを自動的に呼び出す。ポケットベルを持つ者は、この電話機から呼び出されることによってメッセージが録音されたことを知ることができるのである。

【0003】他の情報伝達手段として公衆電話網を介してネットワーク接続されたコンピュータによる電子メールシステムがある。図7は電子メールシステムを含む従来の通信システムのシステム構成図である。図において401は電話機、402はファクシミリ、403はポケットベル、404は電子メールを送受信する電子メールシステムである。電話機401、ファクシミリ402、ポケットベル403を呼出すポケットベルセンタ（図示せず）及び電子メールシステム404は公衆電話網を介して互いに接続されている。

【0004】前述の従来の通信システムは電話機401とポケットベル403とを連携させた上述のメッセージ録音通知機能、ファクシミリ402と電子メールシステム404とを連携させてファクシミリ402から送信されたファクシミリ信号を電子メールシステム404において電子メールとして受信する機能及び電子メールシステム404からの電子メールをファクシミリ信号にしてファクシミリ402へ送信する機能を有する。

【0005】また電子メールシステム404とポケットベル403とを連携させて電子メールシステム404に電子メールが着信したことをポケットベル403へ通知する電子メール着信通知機能がある。

【0006】上述の電子メールシステムに本願出願人が製造、販売するTeamOFFICEがある。TeamOFFICEはLAN（Local Area Net

work）上に電子メールシステムとを主とするクライアント／サーバ型のシステムを構築するソフトウェアである。

【0007】図8は上述の電子メールシステムの概念図である。図において501はサーバであって、サーバ501、クライアント502、503はいずれもごく小規模な区域、例えば同一の建物内に設置されており、LAN504に接続してある。同様にサーバ505、クライアント506、507はいずれもサーバ501とは別の場所に設置されており、LAN508に接続してある。サーバ501及びサーバ505は図示しない公衆電話網を介して通信サービス会社に設置してあるホストコンピュータ509と接続しており、ホストコンピュータ509を介して互いに電子メールの送受信を可能にしている。TeamOFFICEのプログラムはLAN504、508に接続しているサーバ及びクライアントのそれぞれにおいてロードされている。

【0008】またターミナル510、511は前述したコンピュータとは異なる場所に設置してあるコンピュータであって、いずれも図示しない公衆電話網を介してホストコンピュータ509と接続している。ターミナル510、511はそのそれぞれにおいて実行させるプログラムによって、ホストコンピュータ509と接続する他のコンピュータと電子メールの送受信が可能である。さらにホストコンピュータ509は図示しない公衆電話網を介して別の通信サービス会社に設置してあるポケットベルセンタ512と接続されている。ホストコンピュータ509はポケットベルセンタ512を介してポケットベル513を呼出すべくしている。

【0009】前述したTeamOFFICEを含む電子メールシステムは、サーバに電子メールが着信したとき、このことを直ちにこの電子メールを受信すべきクライアントへ通知する。このときクライアントの電源がオフにしてある場合、このクライアントに電子メールを受信する者は電子メールの着信を知ることができない。このような不都合を解消するサービスが電子メール着信通知サービスである。クライアント503に電子メールを受信する者はホストコンピュータ509にポケットベル513の番号及び電子メール着信通知サービスの利用を予め設定し、そのポケットベル513を携帯しておく。この状況においてターミナル511からクライアント503へ電子メールが送信された場合、ホストコンピュータ509はクライアント503のメールサーバであるサーバ501へ電子メールを送信する一方で、設定してあるポケットベル513の番号によりポケットベルセンタ512を介してポケットベル513を呼出す。ポケットベル513のディスプレイには電子メールの着信を通知する定型のメッセージが表示され、この表示によりポケットベル513を持つ者はクライアント503の電源オン／オフに関係なく電子メールの着信を知ることができる。

のである。

【0010】前述の電子メール着信通知サービスは、メールサーバ同士がいずれも同一のホストコンピュータと接続し、このホストコンピュータが公衆電話網と接続し、さらにこの公衆電話網にはポケットベルセンタが接続されてあって、前記メールサーバ同士が前記ホストコンピュータを通じて電子メールの送受信が可能であり、かつ、前記ホストコンピュータがポケットベルセンタを通じてポケットベルを呼出すことが可能であることが不可欠である。

【0011】従ってメールサーバ同士を前述の如くホストコンピュータを介さずに接続した場合は電子メール着信通知サービスが利用できない。また、前述の電子メール着信通知サービスは着信を通知すべき電子メールを選別していないので、例えば至急の電子メールの着信と不急の電子メールの着信とは全く同様に扱われ、いずれの場合も同様の通知を行う。従って外出時等にポケットベルによる至急の電子メールの着信通知を待っている状況において不要な着信通知により煩わされることになる。さらに、前述の電子メール着信通知サービスにおいて、時間帯に応じて異なる通知先に着信通知させたい場合、ホストコンピュータ509に設定してある通知先を時間帯毎に変更する以外に方法はなく、煩わしい。

【0012】本発明は前述の従来の通信システムを進展させるべくなされたものであって、例えば電子メール着信通知については、着信した電子メールに所定のキーワードが含まれる場合にのみポケットベルに通知するといった様に受信装置毎に実行すべき処理の実行条件を設定しておき、受信メッセージが実行条件に合致する場合にのみ処理を実行するメッセージ処理方法及びメッセージ処理システムの提供を目的とする。また、受信装置毎に実行すべき処理の実行条件として時間帯を設定しておき、メッセージを受信した時刻が属する時間帯に設定してある処理を実行するメッセージ処理方法及びメッセージ処理システムの提供を目的とする。

【0013】

【課題を解決するための手段】第1発明に係るメッセージ処理方法は、受信装置毎に、実行すべき処理と受信メッセージの内容又はメッセージの受信状況に基づく前記処理の実行条件とを対応付けて予め設定しておき、前記メッセージを受信したとき、該メッセージの受信装置を識別し、受信メッセージの内容又はメッセージの受信状況が識別された受信装置に設定してある実行条件に合致するか否かを判別し、合致すると判別した場合にその実行条件に対応付けてある処理を実行することを特徴とする。

【0014】第2発明に係るメッセージ処理方法は、受信装置毎に、実行すべき処理とキーワードとを対応付けて予め設定しておき、メッセージを受信したとき、該メッセージの受信装置を識別し、識別された受信装置に設

定してあるキーワードが前記メッセージに含まれるか否かを判別し、含まれると判別した場合にそのキーワードに対応付けてある処理を実行することを特徴とする。

【0015】第3発明に係るメッセージ処理方法は、受信装置毎に、実行すべき処理と時間帯とを対応付けて予め設定しておき、メッセージを受信したとき、該メッセージの受信時刻を判定し、該メッセージの受信装置を識別して、識別された受信装置に設定してある前記受信時刻が属する時間帯に対応付けて設定してある処理を実行することを特徴とする。

【0016】第4発明に係る電子メール処理方法は、サーバを指定した電子メールの受信に応じて、予め設定してある処理を実行する方法において、サーバ毎に、実行すべき処理と受信電子メールの内容又は電子メールの受信状況に基づく前記処理の実行条件とを対応付けて予め設定しておき、前記電子メールを受信したとき、該電子メールを受信したサーバを識別し、受信電子メールの内容又は電子メールの受信状況が識別されたサーバに設定してある実行条件に合致するか否かを判別し、合致すると判別した場合にその実行条件に対応付けてある処理を実行することを特徴とする。

【0017】第5発明に係るメッセージ処理システムは、受信装置毎に、実行すべき処理と受信メッセージの内容又はメッセージの受信状況に基づく前記処理の実行条件とを対応付けて記憶しておく書換え可能な記憶手段と、受信メッセージに指定してある受信装置を識別する手段と、受信メッセージの内容又はメッセージの受信状況が識別された受信装置に対応付けて前記記憶手段に記憶してある実行条件に合致するか否かを判別する手段と、合致すると判別した場合にその実行条件に対応付けてある処理を実行する手段とを備えることを特徴とする。

【0018】第6発明に係るメッセージ処理システムは、受信装置毎に、実行すべき処理とキーワードとを対応付けて記憶しておく書換え可能な記憶手段と、受信メッセージに指定してある受信装置を識別する手段と、識別された受信装置に対応付けて前記記憶手段に記憶してあるキーワードが前記メッセージに含まれるか否かを判別する手段と、含まれると判別した場合にそのキーワードに対応付けてある処理を実行する手段とを備えることを特徴とする。

【0019】第7発明に係るメッセージ処理システムは、受信装置毎に、実行すべき処理と時間帯とを対応付けて記憶しておく書換え可能な記憶手段と、メッセージの受信時刻を判定する手段と、受信メッセージに指定してある受信装置を識別する手段と、識別された受信装置に対応付けて前記記憶手段に記憶してある、前記受信時刻が属する時間帯を識別する手段と、識別した時間帯に対応付けてある処理を実行する手段とを備えることを特徴とする。

【0020】第8発明に係る電子メール処理システムは、複数のサーバと接続しており、前記サーバ毎に実行すべき処理を予め設定しておき、通信網から入力されたサーバを指定した電子メールの受信に応じて予め設定した処理を実行する電子メール処理システムにおいて、サーバ毎に、実行すべき処理と受信電子メールの内容又は電子メールの受信状況に基づく前記処理の実行条件とを対応付けて記憶しておく書換え可能な記憶手段と、受信電子メールに指定してあるサーバを識別する手段と、受信電子メールの内容又は電子メールの受信状況が識別されたサーバに対応付けて前記記憶手段に記憶してある実行条件に合致するか否かを判別する手段と、合致すると判別した場合にその実行条件に対応付けてある処理を実行する手段とを備えることを特徴とする。

【0021】図6は第1発明、第4発明、第5発明及び第8発明のメッセージ処理の概念図であって、電子メールの着信を通知する処理を表している。図において601及び602は電子メールを送受信するサーバである。サーバ602、クライアント604、604…は本発明に係る電子メールシステムを構成している。サーバ602には電子メールを受信したクライアント604、604…に対応付けて設定する実行すべき処理の実行条件としてのスクリプトを記憶させておくスクリプトデータベース603が設けてある。スクリプトはオペレータによりサーバ602の図示しない入力手段により入力される。サーバ602は構内交換機606と接続している。構内交換機606は図示しない公衆電話網と接続している。公衆電話網にはポケットベルセンタ607及び電話機608が接続されている。ポケットベル605はポケットベルセンタ607から呼出される。また電話機608は電話の着信により点灯するランプを備える。

【0022】以下に第2発明及び第6発明のメッセージ処理による処理を対応付けたキーワードをスクリプトとして使用する場合について説明する。ここで受信装置であるクライアント604における実行すべき処理及び該処理を実行する条件(スクリプト)をそれぞれポケットベル605を鳴動させ、着信した電子メールの題名を電子メールのヘッダ部から抜き出してきてポケットベル605のディスプレイに表示させる処理及び電子メールのヘッダ部の送信者名に“福山”を含むクライアント604宛の電子メールがサーバ602に着信したときとして、スクリプトデータベース603に設定されているものとする。

【0023】サーバ601からクライアント604へ電子メールが送信され、サーバ602がこの電子メールを受信したとき、サーバ602は受信した電子メールの送信者に“福山”が含まれるか否かを判別する。含まれると判別した場合は、ポケットベル605を呼出してこの電子メールの題名をポケットベル605へ送信し、そのディスプレイに表示させる。ポケットベル605を携帯

する者はポケットベル605の鳴動によって電子メールの着信を知り、ポケットベル605のディスプレイの表示を見て着信した電子メールの題名を知ることができる。なお、送信者名に“福山”が含まれない場合はポケットベルを呼出さない。

【0024】前述の如く電子メールとポケットベルとを連携させることにより、電子メールの受信者は、電子メールを受信すべきクライアントの電源がオフになっている場合であっても、所望の条件に合致する電子メールの着信をポケットベルによって即時に知ることができる。この電子メール着信通知処理は、例えば“福山”からの電子メールは急を要するのでその着信通知を望むが、他の人からの電子メールによって着信通知されることは望まない場合において有効である。

【0025】また、前述の電子メール着信通知処理はサーバがポケットベルを呼出すべくすることにより、従来の通信システムにおいてポケットベルの呼出しを行っていたホストコンピュータを必要としないという利点がある。

【0026】次に、第3発明及び第7発明のメッセージ処理による時間帯毎に処理を対応付けたスクリプトを使用する場合について説明する。ここで9時から17時の勤務時間中はポケットベル607を携帯し、17時以降の勤務時間外には電話機608がある場所にいる者がクライアント604宛の電子メールの着信を知る場合を想定し、時間帯が9時から17時であればポケットベル607を呼出し、時間帯が17時から9時であれば電話機608のランプを点灯させることを設定してあるものとする。サーバ601からクライアント604へ電子メールが送信され、サーバ602がこの電子メールを受信したとき、サーバ602は受信時刻を判定して、この受信時刻が属する時間帯を識別する。識別した時間帯が勤務時間中であればポケットベルを呼出して電子メールの着信を通知する。識別した時間帯が勤務時間外であれば、電話機608のランプを点灯させて電子メールの着信を通知する。

【0027】以上の様に電子メールの着信に対して時間帯毎に異なる処理を実行させることができるので、時間帯に応じて実行すべき処理を切替える状況において有効である。

【0028】

【発明の実施の形態】図1は本発明に係る電子メールシステムのブロック図である。図において101は建物の構内に構築されたLANのサーバである。サーバ101の主要部を機能ブロック図で示してある。スクリプトデータベース102はこの電子メールシステムによって提供されるサービスの内容及びこの内容と対応させた前記サービスの実行条件を記憶する。スクリプトエンジン103はこの電子メールシステムの主制御部であって、メッセージを受信し、受信したメッセージがスクリプトデ

ータベース102に設定してある処理の実行条件に該当するか否かを判別して、該当すると判別した場合は、その処理を実行する指令を生成し、その処理を実行する実行手段へ出力する。

【0029】サーバ101には更に公衆電話網を介して接続してある外部のメールサーバと電子メールの授受を行うメールサーバ104、同じLANに接続しているクライアント間で共用する文書を記憶するライブラリ105及び電子メールの送信者及び受信者に関する情報を管理する送受信者管理部106を設けてある。

【0030】送受信者管理部106には送信者又は受信者となる登録ユーザ名、登録ユーザの電話番号、登録ユーザのファクシミリ番号、登録ユーザのポケットベル番号及び電子メール着信通知処理等のサービスの使用許可等の情報が記憶させてあって、スクリプトエンジン103又はメールサーバ104等から参照可能になしてある。

【0031】また、サーバ101には後述の構内交換機117を制御する構内交換機制御部107、電子メールをファクシミリに送信するときの信号変換及びファクシミリ信号を電子メールとして受信するためのファクシミリゲートウェイ108及びポケットベルの呼出しを行うポケットベルサーバ109を設けてある。サーバ101はLAN110に接続してあって、同じくLAN110に接続してあるクライアント111、112、113から送受信者管理部106に登録してある登録ユーザの電話番号を照会する機能を有している。クライアント112及び電話機114はクライアント112からオートダイヤルするためのモデム115を介して構内交換機11

7と接続されている。電話機116は構内交換機117と直接接続されている。

【0032】サーバ101は電話の着信を受ける回線制御装置118と接続している。回線制御装置118は構内交換機117と接続している。構内交換機117は公衆電話網119と接続している。公衆電話網119にはメールサーバ120、…、120、電話機121、…、121、ファクシミリ122、…、122及び図示しないポケットベルセンタが接続されている。ポケットベル123、…、123は図示しないポケットベルセンタから無線で呼出される。

【0033】次に前述の電子メールシステムが提供する連携サービスの一例を図1に基づき説明する。電子メール着信通知サービスは電子メールがメールサーバ104に着信したとき受信した電子メールの内容又は電子メールの受信状況がスクリプトデータベース102に設定してある条件を満たした場合に、予め条件と対応付けて設定してある通知先へ所定の手段を用いて電子メールが着信したことを通知するサービスである。表1は受信した電子メールのヘッダの一例及びその電子メールを受信したときに発行されるイベントメッセージを示す表である。表1に示す様に電子メールのヘッダには先頭から順に送信者名、受信者名、送信日時、優先度、秘密度及び題名が記されている。またイベントメッセージの各フィールドは電子メールのヘッダの各項目と対応しており、その情報を格納している。

【0034】

【表1】

【表1】

"福山訓行"					
福山訓行					
送信者名フィールド (64バイト)					
"勝山恒男"					
勝山恒男					
受信者名フィールド (64バイト)					
"19"	"95"	"10"	"20"	"15"	"20"
1995年10月20日15時20分					2
送信日時フィールド					至急 優先度フィールド
1	"明日の会議時間変更"				
普通 秘密度フィールド	明日の会議時間変更 題名フィールド (64バイト)				

【0035】図2はスクリプトデータベース102に記憶させたスクリプトの一例を示す図表である。図2に示す様に先頭から順にスクリプト番号、受信装置、実行条件及び実行すべき処理が記されている。

【0036】1番のスクリプトは実行条件をクライアント111宛に着信した電子メールの送信者名に"福山"が含まれることと定め、この条件を満たす場合に実行すべき処理を所定のポケットベル123を呼出して通知す

ると共に、この電子メールの題名情報をマクロ処理によってコピーし、ポケットベル123のディスプレイに表示することと設定してある。2番のスク립トは実行条件をクライアント111宛に着信した電子メールの送信者名に“山本”が含まれることと定め、この条件を満たす場合に実行すべき処理を所定のポケットベル123を呼出して通知すると共に、この電子メールの送信者名情報からマクロ処理によってその送信者の内線番号を求め、ポケットベル123のディスプレイに表示することと設定してある。

【0037】前述したところの2つのマクロ処理は、いずれも通知内容を指定するためのものであって、それぞれイベントメッセージの所定のフィールドの内容をコピーするコピーマクロ及びイベントメッセージの所定のフィールドの内容と対応する情報を他のデータベース（ここでは送受信者管理部106）から引き出して使用する変換マクロである。

【0038】3番のスク립トは実行条件をクライアント112宛に着信した電子メールの着信時刻が9時から17時の間であることと定め、この条件を満たす場合に実行すべき処理を所定のポケットベル123を呼出して定型文により電子メールの着信を通知することと設定してある。4番のスク립トは実行条件をクライアント112宛に着信した電子メールの着信時刻が17時から翌日の9時の間であることと定め、この条件を満たす場合に実行すべき処理を所定の電話機121を呼出して通知すると設定してあるものとする。

【0039】またこれらのスク립トにはその項目数情報及び各項目毎のデータ長情報並びにマクロ処理であるか否かを示すフラグ情報を記述してあって、しかもこれらの情報に基づき各項目を識別するように構成してあるので、設定できる項目数及びデータ長は可変である。

【0040】図3は前述の電子メール着信通知処理の処理手順を示すフローチャートである。ここでは1番及び2番のスク립トに従ってクライアント111宛の電子メール着信通知処理を行うものとする。表1に示す電子メールがメールサーバ104に着信したとき、スク립トエンジン103は電子メールの受信者名から受信装置をクライアント111と特定する（S201）。このクライアント111に対応付けて予め設定してある前述のスク립トをスク립トデータベース102から読出す（S202）。そして読出したスク립トに従って、電子メールの送信者名に“福山”又は“山本”が含まれるか否かを判別し（S203）、この場合、1番のスク립トの“福山”に該当するので、この条件を満たす場合に実行すべき題名通知マクロ処理を行う（S204）。即ち、所定のポケットベル123を呼出して電子メールの着信を通知すると共に、電子メールのヘッダから題名“明日の会議時間変更”を取込んでポケットベル123へ転送し、そのディスプレイに表示させる。S203に

おいて“福山”及び“山本”が含まれないと判別した場合は、ポケットベル123を呼出さない。

【0041】図4はS204におけるスク립トに指定された処理の実行の処理手順を示すフローチャートである。まずフラグ情報に基づき対象の処理がマクロ処理であるか否かを判別する（S701）。マクロ処理である場合、その種類がコピーマクロであるか変換マクロであるかを判別して（S702）、コピーマクロであるときはイベントメッセージの所定のフィールドの内容を処理の実行を指令するためのサービスメッセージの通知内容フィールドにコピーする（S703）。そして対象の処理が他にあるか否かを判別し（S704）、ない場合はサービスメッセージを発行して処理を実行する（S705）。S704において対象の処理が他にあると判別した場合は、S701へ処理を戻し、以降の処理手順を繰り返す。S701においてマクロ処理でないと判別した場合は、S704へ処理を移行する。またS702において変換マクロであると判別した場合は、イベントメッセージの所定のフィールドの内容を参照し、これと対応する情報を送受信者管理部106から引き出し、この情報を通知すべきメッセージとして（変換）、サービスメッセージの通知内容フィールドに格納する（S706）。そしてS704へ処理を移行する。

【0042】なお、電子メールが着信したとき、クライアント111においては従来と同様の着信通知が行われる。すなわち、クライアント111の電源がオンの場合は直ちに着信通知を行い、電源がオフの場合は次回にクライアント111の電源をオンにしたときにその着信を通知する。

【0043】図5は前述の電子メール着信通知処理の他の処理手順を示すフローチャートである。ここでは、前述した図2の3番及び4番のスク립トに従ってクライアント112宛の電子メール着信通知処理を行うものとする。表1に示す電子メールがメールサーバ104に着信したとき、スク립トエンジン103は電子メールの受信者名から受信装置をクライアント112と特定する（S301）。このクライアント112に対応付けて予め設定してある前述のスク립トをスク립トデータベース102から読出す（S302）。そして読出したスク립トに従って、まず電子メールの着信時刻を、自らに設けてある時計によって判定する（S303）。

【0044】次に着信時刻が3番のスク립トの時間帯（9時から17時）に属するか否かを判別し（S304）、属しないと判別した場合は、4番のスク립トの時間帯（17時から翌日の9時）に属するか否かを判別する（S305）。着信時刻が4番のスク립トの時間帯に属する場合は、電話機121を呼出してランプを点灯させて電子メールの着信を通知する（S307）。

【0045】S304において着信時刻が3番のスク립トの時間帯に属すると判別した場合はポケットベル1

23を呼出して電子メールの着信を通知する(S306)。またこの例においてはS305によって着信時刻が4番のスキプトの時間帯に属しないと判別することは有り得ないが、仮に全てのスキプトの条件の中に合致するものがない場合は、ポケットベル123又は電話機121を呼出すことは行わない。

【0046】なお、電子メールが着信したとき、クライアント112においては従来と同様の着信通知が行われる。すなわち、クライアント112の電源がオンの場合は直ちに着信通知を行い、電源がオフの場合は次回にクライアント112の電源をオンにしたときにその着信を通知する。

【0047】

【発明の効果】以上のように本発明によれば、受信メッセージにより実行する処理を選択するために、処理と対応付けた比較条件を予め設定しておき、受信メッセージがこの比較条件に合致する場合にその比較条件に対応付けてある処理を実行することにより、設定しておく比較条件又はこれに対応付ける処理を変更するだけでメッセージにより実行される処理の変更が容易に行える。また、キーワードを受信装置毎に設定することにより、受信装置に応じて提供するサービスを設定できる。さらに、時間帯毎に異なる処理を対応付けることにより、メ

ッセージを受信した時間帯に応じて提供するサービスを設定できる。

【図面の簡単な説明】

【図1】本発明に係る電子メールシステムのブロック図である。

【図2】本発明に係るスキプトの一例を示す図表である。

【図3】本発明に係るメッセージ処理の処理手順を示すフローチャートである。

【図4】スキプトに指定された処理の実行の処理手順を示すフローチャートである。

【図5】本発明に係るメッセージ処理の処理手順を示すフローチャートである。

【図6】本発明に係るメッセージ処理の概念図である。

【図7】従来の通信システムのシステム構成図である。

【図8】従来の電子メールシステムの概念図である。

【符号の説明】

- 102 スキプトデータベース
- 103 スキプトエンジン
- 104, 120 メールサーバ
- 109 ポケットベルサーバ
- 123 ポケットベル

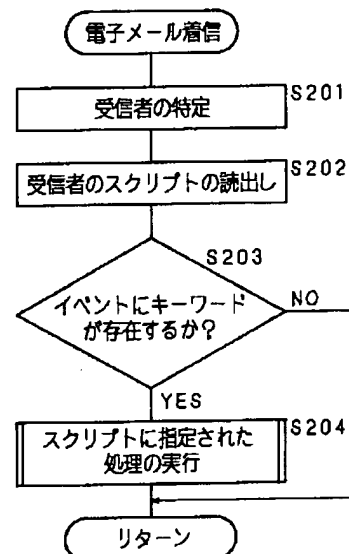
【図2】

本発明に係るスキプトの一例を示す図表

番号	受信装置	実行条件	処 理
1	クライアント111	送信者名→"福山"	通知先 → 035051XXXX (ポケットベル) 通知内容 → 署名(マクロ処理)
2		送信者名→"山本"	通知先 → 035051XXXX (ポケットベル) 通知内容 → 内蔵番号(マクロ処理)
3	クライアント112	時間帯 → 9時~17時	通知先 → 035051XXXX (ポケットベル) 通知内容 → 定型文
4		時間帯 → 17時~9時	通知先 → 078934XXXX (電話) 通知内容 → ランプ点灯
5	クライアント113	曜日 → "金曜"	通知先 → 078934XXXX (電話) 通知内容 → ランプ点灯

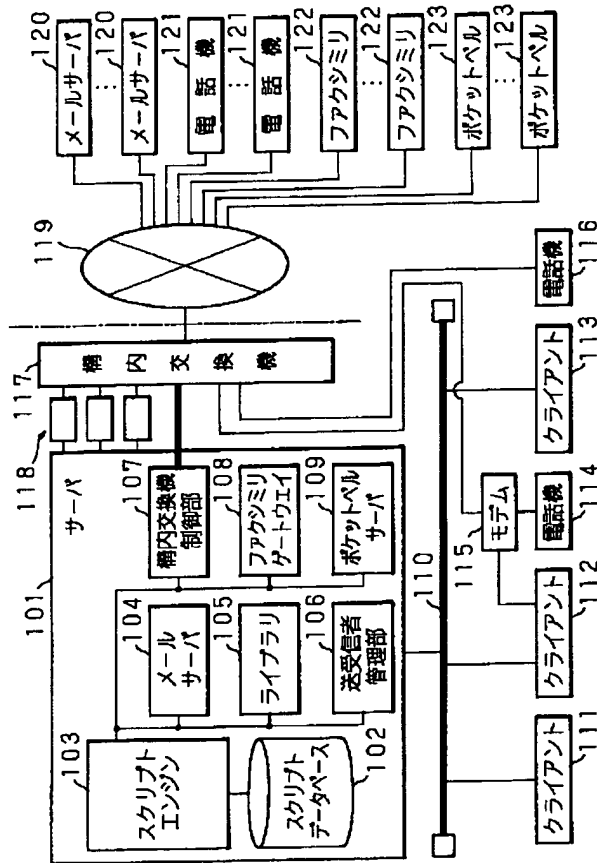
【図3】

本発明に係るメッセージ処理の処理手順を示すフローチャート



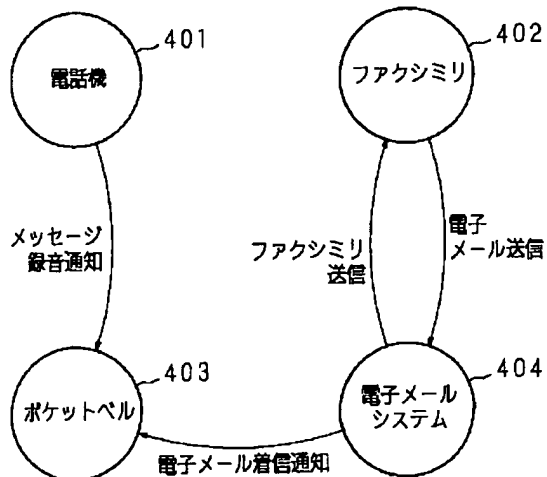
【図1】

本発明に係る電子メールシステムのブロック図



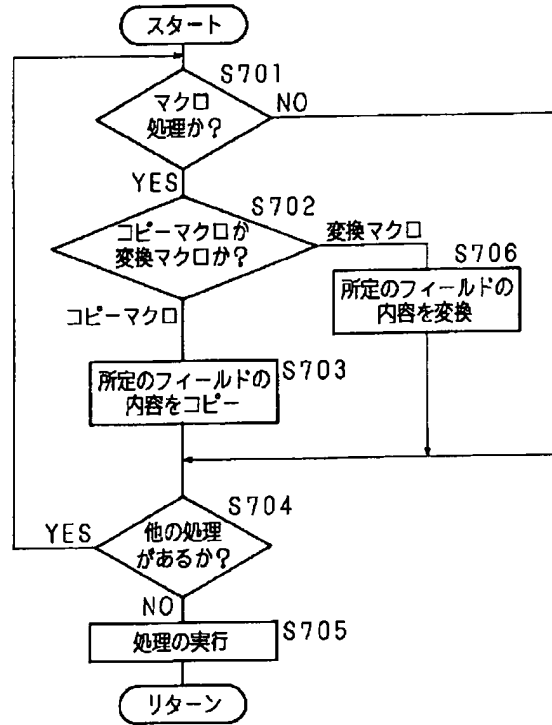
【図7】

従来の通信システムのシステム構成図



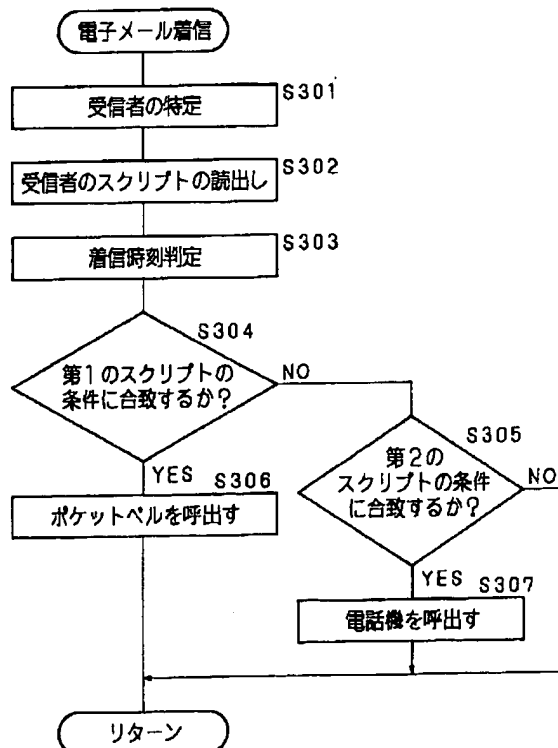
【図4】

スクリプトに指定された処理の実行の処理手順を示すフローチャート



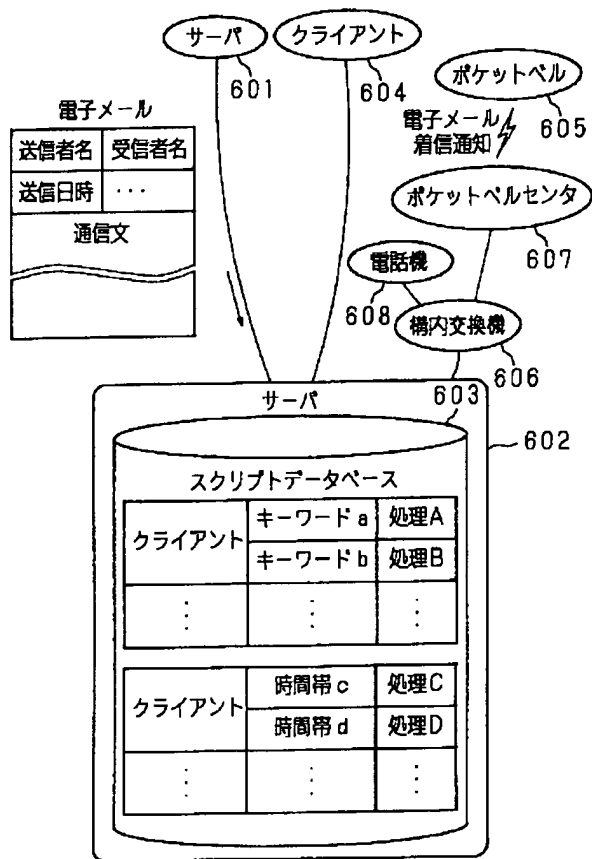
【図5】

本発明に係るメッセージ処理の処理手順を示すフローチャート



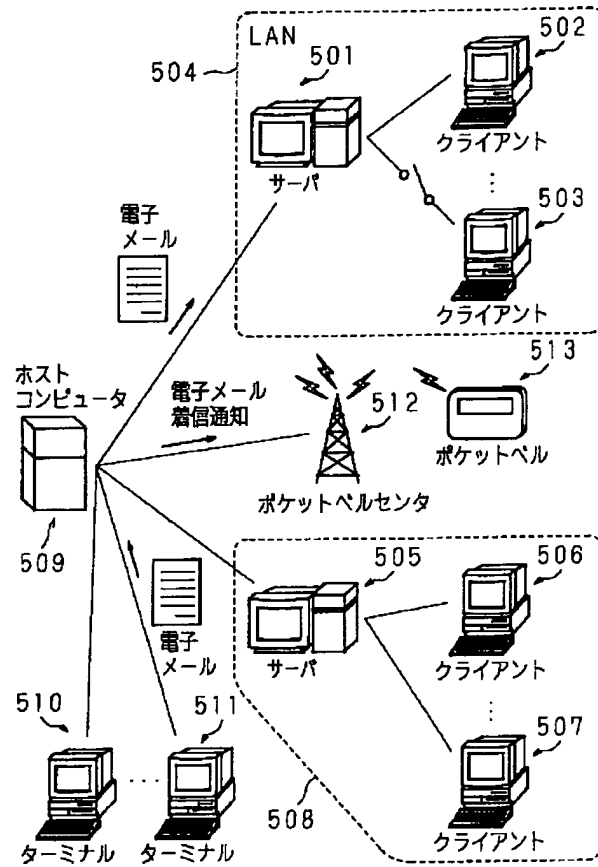
【図6】

本発明に係るメッセージ処理の概念図



【図8】

従来の電子メールシステムの概念図



フロントページの続き

(72)発明者 岡田 純代
 神奈川県川崎市中原区上小田中4丁目1番
 1号 富士通株式会社内

(72)発明者 岩尾 忠重
 神奈川県川崎市中原区上小田中4丁目1番
 1号 富士通株式会社内

(72)発明者 森永 正信
 神奈川県川崎市中原区上小田中4丁目1番
 1号 富士通株式会社内

(72)発明者 小野川 浩之
 神奈川県川崎市中原区上小田中4丁目1番
 1号 富士通株式会社内

(72)発明者 長谷川 博己
 神奈川県川崎市中原区上小田中4丁目1番
 1号 富士通株式会社内

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CLAIMS

[Claim(s)]

[Claim 1]In a method of performing processing set up beforehand according to reception of a message which specified a receiving set, When an execution condition of said processing based on the contents of processing which should be performed, and the incoming message, or a receiving condition of a message is matched for every receiving set, it sets up beforehand and said message is received, A message processing method performing processing matched with the execution condition when it distinguishes and agreed [whether it agrees in an execution condition set as a receiving set with which a receiving set of this message was identified and the contents of the incoming message or a receiving condition of a message was identified, and] and distinguishes.

[Claim 2]In a method of performing processing set up beforehand according to reception of a message which specified a receiving set, When processing and a keyword which should be performed are matched for every receiving set, it sets up beforehand and a message is received, A message processing method performing processing matched with the keyword when it distinguishes and included whether a keyword which identifies a receiving set of this message and has been set as an identified receiving set would be contained in said message and distinguishes.

[Claim 3]In a method of performing processing set up beforehand according to reception of a message which specified a receiving set, When processing and a time zone which should be performed are matched for every receiving set, it sets up beforehand and a message is received, A message processing method performing processing which is matched and has been set as a time zone when said receipt time which judges the receipt time of this message, identifies a receiving set of this message, and has been set as an identified receiving set belongs.

[Claim 4]In a method of performing processing set up beforehand according to reception of an E-mail which specified a server, When an execution condition of said processing based on the contents of processing which should be performed, and the received electronic mail, or a receiving condition of an E-mail is matched for every server, it sets up beforehand and said E-mail is received, It is distinguished whether it agrees in an execution condition set as a server from which a server which received this E-mail was discriminated, and the contents of the received electronic mail or a receiving condition of an E-mail was discriminated, An E-mail disposal method performing processing matched with the execution condition when it agreed and distinguishes.

[Claim 5]A Message Handling system which performs processing which has connected with two or more receiving sets, sets up beforehand processing which should be performed for said every receiving set, and was beforehand set up according to reception of a message which specified a receiving set inputted from a communications network, comprising:

A rewritable memory measure which matches and memorizes an execution condition of said processing based on the contents of processing which should be performed, and the incoming message, or a receiving condition of a message for every receiving set.

A means to identify a receiving set specified as an incoming message.

A means to distinguish whether it agrees in an execution condition which is matched with a receiving set with which the contents of the incoming message or a receiving condition of a message was identified, and has been memorized to said memory measure.

A means to perform processing matched with the execution condition when it agreed and distinguishes.

[Claim 6]A Message Handling system which performs processing which has connected with two or more receiving sets, sets up beforehand processing which should be performed for said every receiving set, and was beforehand set up according to reception of a message which specified a receiving set inputted from a communications network, comprising:

A rewritable memory measure which matches and memorizes processing and a keyword which should be performed for every receiving set.

A means to identify a receiving set specified as an incoming message.

A means to distinguish whether a keyword which is matched with an identified receiving set and has been memorized to said memory measure is contained in said message.

A means to perform processing matched with the keyword when were contained and it distinguishes.

[Claim 7]A Message Handling system which performs processing which has connected with two or more receiving sets, sets up beforehand processing which should be performed for said every receiving set, and was beforehand set up according to reception of a message which specified a receiving set inputted from a communications network, comprising:

A rewritable memory measure which matches and memorizes processing and a time zone which should be performed for every receiving set.

A means to judge the receipt time of a message.

A means to identify a receiving set specified as an incoming message.

A means to identify a time zone which is matched with an identified receiving set and has been memorized to said memory measure and when said receipt time belongs.

A means to perform processing matched with an identified time zone.

[Claim 8]An electronic mail processing system which performs processing which has connected with two or more servers, sets up beforehand processing which should be performed for said every server, and was beforehand set up according to reception of an E-mail which specified a server inputted from a communications network, comprising:

A rewritable memory measure which matches and memorizes an execution condition of said processing based on the contents of processing which should be performed, and the received electronic mail, or a receiving condition of an E-mail for every server.

A means to identify a server specified as a received electronic mail.

A means to distinguish whether it agrees in an execution condition which is matched with a server from which the contents of the received electronic mail or a receiving condition of an E-mail was discriminated, and has been memorized to said memory measure.

A means to perform processing matched with the execution condition when it agreed and distinguishes.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates to the Message Handling system used for the operation of a message processing method and this method which chooses and performs processing according to the message which the computer which has carried out network connection to the external information transmission means via the public telephone network received.

[0002]

[Description of the Prior Art]There are telephone, a facsimile, and a pager as an information transmission means. In recent years, the device which demonstrates a new functional effect is known by combining, cooperating and operating these information transmission means for a certain purpose. For example, it is an answering machine and the telephone which has a function which notifies a pager that it combined with the pager and the message was recorded is the example. In advance of use of a notice function, the number of the pager of a report destination is beforehand set to this telephone. And this telephone calls automatically the pager of the number set up beforehand, when a message is recorded by a telephone answering function. The person with a pager can know that the message was recorded by being called from this telephone.

[0003]There is an electronic mail system by the computer by which network connection was carried out via the public telephone network as other information transmission means. Drawing 7 is a system configuration figure of the conventional communications system containing an electronic mail system. In a figure, 401 is an electronic mail system with which telephone and 402 transmit and receive a facsimile, 403 transmits and receives a pager, and 404 transmits and receives an E-mail. The pager center (not shown) and the electronic mail system 404 which call the telephone 401, the facsimile 402, and the pager 403 are mutually connected via the public telephone network.

[0004]The above-mentioned message sound recording notice function with which the above-mentioned conventional communications system made the telephone 401 and the pager 403 cooperate, In the electronic mail system 404 the facsimile signal which made the facsimile 402 and the electronic mail system 404 cooperate, and was transmitted from the facsimile 402. It has a function which makes a facsimile signal the function and the E-mail from the electronic mail system 404 which are received as an E-mail, and

transmits to the facsimile 402.

[0005]There is an E-mail incoming call notice function which notifies the pager 403 that the electronic mail system 404 and the pager 403 were made to cooperate, and the E-mail received a message in the electronic mail system 404.

[0006]An above-mentioned electronic mail system has TeamOFFICE which an applicant for this patent manufactures and is sold. TeamOFFICE is software which builds the client/server type system which is mainly concerned with an electronic mail system on LAN (Local Area Network).

[0007]Drawing 8 is a key map of an above-mentioned electronic mail system. In a figure, 501 is a server, all are installed in the very small-scale zone, for example, the same building, and the server 501 and the client 502,503 are connected to LAN504. Similarly, the server 505 and the client 506,507 are installed in somewhere else [the server 501] by each, and are connected to LAN508. The E-mail is mutually transmitted [the server 501 and the server 505 have connected with the host computer 509 currently installed in the communications service company via the public telephone network which is not illustrated, and] and received possible via the host computer 509. The program of TeamOFFICE is loaded in each of the server linked to LAN504,508, and a client.

[0008]The computer mentioned above is a computer installed in a different place, and the terminal 510,511 is connected with the host computer 509 via the public telephone network illustrating neither. Other computers and the transmission and reception of an E-mail which are connected with the host computer 509 by the program performed in the each are possible for the terminal 510,511. Furthermore, the host computer 509 is connected with the pager center 512 currently installed in another communications service company via the public telephone network which is not illustrated. The host computer 509 is made so that it may call the pager 513 via the pager center 512.

[0009]When an E-mail receives a message in a server, as for the electronic mail system containing TeamOFFICE mentioned above, this is notified to the client which should receive this E-mail promptly. When the power supply of the client is turned OFF at this time, those who receive an E-mail to this client cannot know arrival of an E-mail. The service which cancels such inconvenience is E-mail incoming call notice service. Those who receive an E-mail to the client 503 set beforehand the number of the pager 513, and use of E-mail incoming call notice service as the host computer 509, and carry the pager 513. When an E-mail is transmitted to the client 503 from the terminal 511 in this situation, while the host computer 509 transmits an E-mail to the server 501 which is a mail server of the client 503, The pager 513 is called via the pager center 512 by the number of the set-up pager 513. The message of the fixed form which notifies the arrival of an E-mail is displayed on the display of the pager 513, and those who have the pager 513 by this display can know the arrival of the E-mail regardless of the power turn/OFF of the client 503.

[0010]Each mail server connects the above-mentioned E-mail incoming call notice service with the same host computer, This host computer connects with a public telephone network, and the pager center is further connected to this public telephone network, It is indispensable for said mail servers to be possible for transmission and reception of an E-mail through said host computer, and for said host computer to be able to call a pager through a pager center.

[0011]Therefore, when mail servers are connected without passing a host computer like the above-mentioned, E-mail incoming call notice service cannot be used. Since the above-mentioned E-mail incoming

call notice service is not sorting out the E-mail which should notify mail arrival, the arrival of an urgent E-mail and the arrival of an un-sudden E-mail are treated similarly, and completely perform the notice same in any case, for example. Therefore, in the situation where it is waiting for the incoming call notice of the urgent E-mail by a pager at the time of going out, etc., it will trouble by an unnecessary incoming call notice. In the above-mentioned E-mail incoming call notice service, there is no method besides changing the report destination set as the host computer 509 for every time zone and it is troublesome to a different report destination according to a time zone to carry out an incoming call notice.

[0012]This invention is made so that it may develop the above-mentioned conventional communications system, for example, about an E-mail incoming call notice. The execution condition of the processing which should be performed for every receiving set as it said that it notified to a pager only when a predetermined keyword is contained in the E-mail which received a message is set up, Only when an incoming message agrees in an execution condition, it aims at offer of the message processing method and Message Handling system which perform processing. The time zone is set up as an execution condition of the processing which should be performed for every receiving set, and it aims at offer of the message processing method and Message Handling system which perform processing set as the time zone when the time which received the message belongs.

[0013]

[Means for Solving the Problem]When a message processing method concerning the 1st invention matches an execution condition of said processing based on the contents of processing which should be performed, and the incoming message, or a receiving condition of a message for every receiving set, and sets it up beforehand and said message is received, When it distinguishes and agreed [whether it agrees in an execution condition set as a receiving set with which a receiving set of this message was identified and the contents of the incoming message or a receiving condition of a message was identified, and] and distinguishes, processing matched with the execution condition is performed.

[0014]When a message processing method concerning the 2nd invention matches processing and a keyword which should be performed for every receiving set, and sets them up beforehand and a message is received, When it distinguishes and included whether a keyword which identifies a receiving set of this message and has been set as an identified receiving set would be contained in said message and distinguishes, processing matched with the keyword is performed.

[0015]When a message processing method concerning the 3rd invention matches processing and a time zone which should be performed for every receiving set, and sets them up beforehand and a message is received, Processing which is matched and has been set as a time zone when said receipt time which judges the receipt time of this message, identifies a receiving set of this message, and has been set as an identified receiving set belongs is performed.

[0016]In a method of an E-mail disposal method concerning the 4th invention performing processing set up beforehand according to reception of an E-mail which specified a server, When an execution condition of said processing based on the contents of processing which should be performed, and the received electronic mail, or a receiving condition of an E-mail is matched for every server, it sets up beforehand and said E-mail is received, When it distinguishes and agreed [whether it agrees in an execution condition set as a server from which a server which received this E-mail was discriminated, and the contents of the

received electronic mail or a receiving condition of an E-mail was discriminated, and] and distinguishes, processing matched with the execution condition is performed.

[0017]A rewritable memory measure which a Message Handling system concerning the 5th invention matches an execution condition of said processing based on the contents of processing which should be performed for every receiving set, and the incoming message, or a receiving condition of a message, and is memorized, A means to distinguish whether it agrees in an execution condition which is matched with a means to identify a receiving set specified as an incoming message, and a receiving set, with which the contents of the incoming message or a receiving condition of a message was identified, and has been memorized to said memory measure, When it agreed and distinguishes, it has a means to perform processing matched with the execution condition.

[0018]A rewritable memory measure which a Message Handling system concerning the 6th invention matches processing and a keyword which should be performed for every receiving set, and is memorized, A means to distinguish whether a means to identify a receiving set specified as an incoming message, and a keyword which is matched with an identified receiving set and has been memorized to said memory measure are contained in said message, When were contained and it distinguishes, it has a means to perform processing matched with the keyword.

[0019]A rewritable memory measure which a Message Handling system concerning the 7th invention matches processing and a time zone which should be performed for every receiving set, and is memorized, A means to judge the receipt time of a message, and a means to identify a receiving set specified as an incoming message, It has a means to identify a time zone which is matched with an identified receiving set and has been memorized to said memory measure and when said receipt time belongs, and a means to perform processing matched with an identified time zone.

[0020]An electronic mail processing system which this invention requires for the 8th invention, It has connected with two or more servers, processing which should be performed for said every server is set up beforehand, and an electronic mail processing system which performs processing beforehand set up according to reception of an E-mail which specified a server inputted from a communications network is characterized by comprising the following:

A rewritable memory measure which matches and memorizes an execution condition of said processing based on the contents of processing which should be performed, and the received electronic mail, or a receiving condition of an E-mail for every server.

A means to identify a server specified as a received electronic mail.

A means to distinguish whether it agrees in an execution condition which is matched with a server from which the contents of the received electronic mail or a receiving condition of an E-mail was discriminated, and has been memorized to said memory measure.

A means to perform processing matched with the execution condition when it agreed and distinguishes.

[0021]Drawing 6 is a key map of message processing of the 1st invention, the 4th invention, the 5th invention, and the 8th invention, and expresses processing which notifies arrival of an E-mail. In a figure, 601 and 602 are servers which transmit and receive an E-mail. The server 602 and client 604,604 -- constitute an electronic mail system concerning this invention. The script data base 603 which makes a

script as an execution condition of processing which is matched and is set as client 604,604 -- which received an E-mail, and which should be performed memorize is formed in the server 602. A script is inputted by an input means which the server 602 does not illustrate with an operator. The server 602 has connected with the private branch exchange 606. The private branch exchange 606 is connected with a public telephone network which is not illustrated. The pager center 607 and the telephone 608 are connected to a public telephone network. The pager 605 is called from the pager center 607. The telephone 608 is provided with a lamp turned on by arrival of a telephone.

[0022]A case where a keyword which matched processing by message processing of the 2nd invention and the 6th invention with below is used as a script is explained. Singing of the pager 605 is carried out for conditions (script) which perform processing which should be performed and this processing in the client 604 which is a receiving set here, respectively, When an E-mail addressed to client 604 which includes "Fukuyama" in a transmitting person name of a header unit of processing which extracts a title of an E-mail which received a message from a header unit of an E-mail, and is displayed on a display of the pager 605, and an E-mail receives a message in the server 602, [*****] It shall be set as the script data base 603.

[0023]When an E-mail is transmitted to the client 604 from the server 601 and the server 602 receives this E-mail, the server 602 distinguishes whether "Fukuyama" is included in a sending person of an E-mail who received. When were contained and it distinguishes, the pager 605 is called, a title of this E-mail is transmitted to the pager 605, and it is made to display on that display. Those who carry the pager 605 can know arrival of an E-mail by singing of the pager 605, and can know a title of an E-mail which looked at a display of a display of the pager 605 and received a message. A pager is not called when "Fukuyama" is not included in a transmitting person name.

[0024]Even if an addressee of an E-mail is a case where a power supply of a client which should receive an E-mail is come by off, by making an E-mail and a pager cooperate like the above-mentioned, arrival of an E-mail corresponding to desired conditions can be immediately known by a pager. Since an E-mail from "Fukuyama" is urgent, it desires that incoming call notice, for example, but as for this E-mail incoming call notice processing, it is effective that an incoming call notice is carried out by an E-mail from other persons, when it does not wish.

[0025]There is an advantage that the above-mentioned E-mail incoming call notice processing does not need a host computer which was performing a call of a pager in the conventional communications system by making so that a server may call a pager.

[0026]Next, a case where a script by message processing of the 3rd invention and the 7th invention which matched processing for every time zone is used is explained. Inside of office hours at 9:00 to 17:00 carries the pager 607 here, A case where those who are present in a place where the telephone 608 is in off-duty [after 17:00] get to know arrival of an E-mail addressed to client 604 is assumed, If a time zone will be from 9:00 at 17:00, the pager 607 will be called, and if a time zone will be from 17:00 at 9:00, it shall have set up making a lamp of the telephone 608 turn on. When an E-mail is transmitted to the client 604 from the server 601 and the server 602 receives this E-mail, the server 602 judges the receipt time and identifies a time zone when this receipt time belongs. If an identified time zone is among office hours, a pager will be called and arrival of an E-mail will be notified. If an identified time zone is off-duty, a lamp of the telephone 608 will be made to turn on and arrival of an E-mail will be notified.

[0027]Since processing which is different for every time zone to arrival of an E-mail as mentioned above can be performed, in a situation of changing processing which should be performed according to a time zone, it is effective.

[0028]

[Embodiment of the Invention]Drawing 1 is a block diagram of the electronic mail system concerning this invention. In a figure, 101 is a server of LAN built within the enclosure of a building. The functional block diagram has shown the principal part of the server 101. The script data base 102 memorizes the contents of the service provided by this electronic mail system and these contents, and the execution condition of said service to which it was made to correspond. It is distinguished whether the script engine 103 is a main control part of this electronic mail system, a message is received, and the message which received corresponds to the execution condition of the processing set as the script data base 102, When it corresponded and distinguishes, the instructions which perform the processing are generated and it outputs to the execution means which performs the processing.

[0029]To the server 101, via a public telephone network further. The transceiver person Management Department 106 which manages the information about the sending person and addressee of the library 105 and an E-mail who memorize the document shared between the mail server of the connected exterior, the mail server 104 which performs transfer of an E-mail, and the client linked to the same LAN is formed.

[0030]Information, including the licence etc. of services, such as a registered user name which serves as a sending person or an addressee, a registered user's telephone number, a registered user's facsimile number, a registered user's pager number, and E-mail incoming call notice processing, makes the transceiver person Management Department 106 have memorized, Reference has made it possible from the script engine 103 or the mail server 104 grade.

[0031].When transmitting to a facsimile the private branch exchange control section 107 and E-mail which control the below-mentioned private branch exchange 117 to the server 101. The pager server 109 which performs the facsimile gateway 108 for receiving ***** and a facsimile signal as an E-mail and the call of a pager is formed. The server 101 has the function to refer for the telephone number of the registered user registered into the transceiver person Management Department 106 from the client 111,112,113 which has been connected to LAN110 and has similarly been connected to LAN110. The client 112 and the telephone 114 are connected with the private branch exchange 117 via the modem 115 for carrying out auto dialing from the client 112. Direct continuation of the telephone 116 is carried out to the private branch exchange 117.

[0032]The server 101 has connected with the communication control unit 118 which receives the arrival of a telephone. The communication control unit 118 is connected with the private branch exchange 117. The private branch exchange 117 is connected with the public telephone network 119. The mail servers 120, --, 120, the telephones 121, --, 121, the facsimiles 122, --, 122, and the pager center that is not illustrated are connected to the public telephone network 119. The pagers 123, --, 123 are called by radio from the pager center which is not illustrated.

[0033]Next, an example of the cooperation service which the above-mentioned electronic mail system provides is explained based on drawing 1. When the contents of the E-mail or the receiving condition of an E-mail received when an E-mail received a message in the mail server 104 fulfills the conditions set as the

script data base 102, E-mail incoming call notice service, It is the service which reports that it matched with conditions beforehand and the E-mail received a message using the predetermined means to the set-up report destination. Table 1 is a table showing the event message published when an example of the received header of an E-mail and its E-mail are received. As shown in Table 1, a transmitting person name, an addressee name, a transmission date, a priority, sensitivity, and a title are describing sequentially from the head at the header of the E-mail. Each field of an event message corresponds with each item of the header of an E-mail, and stores the information.

[0034]
[Table 1]
【表 1】

“福山訓行”					
福山訓行 送信者名フィールド (64バイト)					
“勝山恒男”					
勝山恒男 受信者名フィールド (64バイト)					
“19”	“95”	“10”	“20”	“15”	“20”
1995年10月20日15時20分 送信日時フィールド					2 至急 優先度フィールド
1	“明日の会議時間変更”				
普通 秘密度フィールド	明日の会議時間変更 題名フィールド (64バイト)				

[0035]Drawing 2 is a chart showing an example of the script stored in the script data base 102. As shown in drawing 2, a script number, a receiving set, an execution condition, and the processing that should be performed are describing sequentially from the head.

[0036]The script of No. 1 calls the predetermined pager 123, and notifies the processing which should be performed when setting an execution condition that "Fukuyama" is included in the transmitting person name of the E-mail which received a message in the client 111 and fulfilling this condition, and. The title information on this E-mail is copied by macro processing, and it has set to displaying on the display of the pager 123. The script of No. 2 calls the predetermined pager 123, and notifies the processing which should be performed when setting an execution condition that "Yamamoto" is included in the transmitting person name of the E-mail which received a message in the client 111 and fulfilling this condition, and. It asks for that sending person's extension number by macro processing from the transmitting person name information on this E-mail, and has set to displaying on the display of the pager 123.

[0037]Each of two macro processings mentioned above is for specifying a notice content, It is a conversion broad view which pulls out and uses the contents of the predetermined field of the copy broad view which copies the contents of the predetermined field of an event message, respectively, and an event message, and corresponding information from other databases (here transceiver person Management Department

106).

[0038]The script of No. 3 is set to setting an execution condition that the mail arrival time of the E-mail which received a message in the client 112 is from 9:00 to 17:00, calling the predetermined pager 123 for the processing which should be performed when fulfilling this condition, and notifying the arrival of an E-mail by a fixed form sentence. If the script of No. 4 calls the predetermined telephone 121 and the processing which should be performed when the mail arrival time of the E-mail which received a message in the client 112 determines that an execution condition is during 9:00 of the next day from 17:00 and it fulfills this condition is notified, it shall be set up.

[0039]Since it constitutes so that the flag information which shows whether they are the item number information, the data length information for every item, and macro processing may be described in these scripts and each item may moreover be identified based on these information, the number of items and data length which can be set up are variable.

[0040]Drawing 3 is a flow chart which shows the procedure of the above-mentioned E-mail incoming call notice processing. Here, according to the script of No. 1 and No. 2, E-mail incoming call notice processing addressed to client 111 shall be performed. When the E-mail shown in Table 1 receives a message in the mail server 104, the script engine 103 specifies a receiving set with the client 111 from the addressee name of an E-mail (S201). The above-mentioned script which is matched with this client 111 and has been set up beforehand is read from the script data base 102 (S202). And since it distinguishes whether "Fukuyama" or "Yamamoto" is included in the transmitting person name of an E-mail according to the read script (S203) and corresponds to "Fukuyama" of the script of No. 1 in this case, notice of title macroscopic processing which should be performed when fulfilling this condition is performed (S204). That is, call the predetermined pager 123 and the arrival of an E-mail is notified, and a title "tomorrow's conference time change" is incorporated from the header of an E-mail, and it transmits to the pager 123, and is made to display on the display. The pager 123 is not called, when "Fukuyama" and "Yamamoto" were not included in S203 and it distinguishes.

[0041]Drawing 4 is a flow chart which shows the procedure of execution of the processing specified as the script in S204. Based on flag information, it is distinguished first whether the target processing is macro processing (S701). When it is macro processing, it is distinguished whether the kind is a copy broad view or it is a conversion broad view (S702). When it is a copy broad view, it copies to the notice content field of the service message for ordering it execution of processing of the contents of the predetermined field of an event message (S703). And when distinguish (S704) and there is [whether there are any other target processings and] nothing, a service message is published and processing is performed (S705). When there were the other target processings in S704 and it distinguishes, processing is returned to S701 and subsequent procedure is repeated. When it was not macro processing in S701 and distinguishes, processing is shifted to S704. When it distinguishes that it is a conversion broad view in S702, With reference to the contents of the predetermined field of an event message, this and corresponding information are pulled out from the transceiver person Management Department 106, and it is considered as the message which should notify this information (conversion), and stores in the notice content field of a service message (S706). And processing is shifted to S704.

[0042]When an E-mail receives a message, in the client 111, the same incoming call notice as usual is

performed. That is, when the power supply of the client 111 is one, an incoming call notice is performed promptly, and the arrival is notified, when a power supply is OFF and the power supply of the client 111 is made one next time.

[0043]Drawing 5 is a flow chart which shows other procedure of the above-mentioned E-mail incoming call notice processing. Here, according to the script of No. 3 and No. 4 of drawing 2 mentioned above, E-mail incoming call notice processing addressed to client 112 shall be performed. When the E-mail shown in Table 1 receives a message in the mail server 104, the script engine 103 specifies a receiving set with the client 112 from the addressee name of an E-mail (S301). The above-mentioned script which is matched with this client 112 and has been set up beforehand is read from the script data base 102 (S302). And according to the read script, the mail arrival time of an E-mail is first judged by the clock formed in oneself (S303).

[0044]Next, when are not distinguished and (S304) belonged [whether mail arrival time belongs to the time zone (from 9:00 to 17:00) of the script of No. 3, and] and it distinguishes, it is distinguished whether it belongs to the time zone (9:00 of 17:00 to the next day) of the script of No. 4 (S305). When mail arrival time belongs to the time zone of the script of No. 4, call the telephone 121, a lamp is made to turn on and the arrival of an E-mail is notified (S307).

[0045]When mail arrival time belonged to the time zone of the script of No. 3 in S304 and it distinguishes, the pager 123 is called and the arrival of an E-mail is notified (S306). Although it is not possible to distinguish if mail arrival time does not belong to the time zone of the script of No. 4 by S305 in this example, when there is nothing that agrees in the conditions of all the scripts temporarily, it does not perform calling the pager 123 or the telephone 121.

[0046]When an E-mail receives a message, in the client 112, the same incoming call notice as usual is performed. That is, when the power supply of the client 112 is one, an incoming call notice is performed promptly, and the arrival is notified, when a power supply is OFF and the power supply of the client 112 is made one next time.

[0047]

[Effect of the Invention]In order to choose the processing performed by an incoming message as mentioned above according to this invention, By performing processing matched with that relation condition when the relation condition matched with processing is set up beforehand and an incoming message agrees in this relation condition, The processing performed by the message can be easily changed only by changing the processing matched with the relation condition or this which is set up. The service provided according to a receiving set can be set up by setting up a keyword for every receiving set. The service provided according to the time zone which received the message can be set up by matching different processing for every time zone.

[Translation done.]

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TECHNICAL FIELD

[Field of the Invention]This invention relates to the Message Handling system used for the operation of a message processing method and this method which chooses and performs processing according to the message which the computer which has carried out network connection to the external information transmission means via the public telephone network received.

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Invention]As mentioned above, by this invention, in order to choose the processing performed by an incoming message, when the relation condition matched with processing is set up beforehand and an incoming message agrees in this relation condition, processing matched with that relation condition is performed.

Therefore, the processing performed by the message can be easily changed only by changing the processing matched with the relation condition or this which is set up.

The service provided according to a receiving set can be set up by setting up a keyword for every receiving set. The service provided according to the time zone which received the message can be set up by matching different processing for every time zone.

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TECHNICAL PROBLEM

[Description of the Prior Art]There are telephone, a facsimile, and a pager as an information transmission means. In recent years, the device which demonstrates a new functional effect is known by combining, cooperating and operating these information transmission means for a certain purpose. For example, it is an answering machine and the telephone which has a function which notifies a pager that it combined with the pager and the message was recorded is the example. In advance of use of a notice function, the number of the pager of a report destination is beforehand set to this telephone. And this telephone calls automatically the pager of the number set up beforehand, when a message is recorded by a telephone answering function. The person with a pager can know that the message was recorded by being called from this telephone.

[0003]There is an electronic mail system by the computer by which network connection was carried out via the public telephone network as other information transmission means. Drawing 7 is a system configuration figure of the conventional communications system containing an electronic mail system. In a figure, 401 is an electronic mail system with which telephone and 402 transmit and receive a facsimile, 403 transmits and receives a pager, and 404 transmits and receives an E-mail. The pager center (not shown) and the electronic mail system 404 which call the telephone 401, the facsimile 402, and the pager 403 are mutually connected via the public telephone network.

[0004]The above-mentioned message sound recording notice function with which the above-mentioned conventional communications system made the telephone 401 and the pager 403 cooperate, In the electronic mail system 404 the facsimile signal which made the facsimile 402 and the electronic mail system 404 cooperate, and was transmitted from the facsimile 402. It has a function which makes a facsimile signal the function and the E-mail from the electronic mail system 404 which are received as an E-mail, and transmits to the facsimile 402.

[0005]There is an E-mail incoming call notice function which notifies the pager 403 that the electronic mail system 404 and the pager 403 were made to cooperate, and the E-mail received a message in the electronic mail system 404.

[0006]An above-mentioned electronic mail system has TeamOFFICE which an applicant for this patent manufactures and is sold. TeamOFFICE is software which builds the client/server type system which is mainly concerned with an electronic mail system on LAN (Local Area Network).

[0007]Drawing 8 is a key map of an above-mentioned electronic mail system. In a figure, 501 is a server, all are installed in the very small-scale zone, for example, the same building, and the server 501 and the client 502,503 are connected to LAN504. Similarly, the server 505 and the client 506,507 are installed in somewhere else [the server 501] by each, and are connected to LAN508. The E-mail is mutually transmitted [the server 501 and the server 505 have connected with the host computer 509 currently installed in the communications service company via the public telephone network which is not illustrated, and] and received possible via the host computer 509. The program of TeamOFFICE is loaded in each of the server linked to LAN504,508, and a client.

[0008]The computer mentioned above is a computer installed in a different place, and the terminal 510,511 is connected with the host computer 509 via the public telephone network illustrating neither. Other computers and the transmission and reception of an E-mail which are connected with the host computer 509 by the program performed in the each are possible for the terminal 510,511. Furthermore, the host computer 509 is connected with the pager center 512 currently installed in another communications service company via the public telephone network which is not illustrated. The host computer 509 is made so that it may call the pager 513 via the pager center 512.

[0009]When an E-mail receives a message in a server, as for the electronic mail system containing TeamOFFICE mentioned above, this is notified to the client which should receive this E-mail promptly. When the power supply of the client is turned OFF at this time, those who receive an E-mail to this client cannot know arrival of an E-mail. The service which cancels such inconvenience is E-mail incoming call notice service. Those who receive an E-mail to the client 503 set beforehand the number of the pager 513, and use of E-mail incoming call notice service as the host computer 509, and carry the pager 513. When an E-mail is transmitted to the client 503 from the terminal 511 in this situation, while the host computer 509 transmits an E-mail to the server 501 which is a mail server of the client 503, The pager 513 is called via the pager center 512 by the number of the set-up pager 513. The message of the fixed form which notifies the arrival of an E-mail is displayed on the display of the pager 513, and those who have the pager 513 by this display can know the arrival of the E-mail regardless of the power turn/OFF of the client 503.

[0010]Each mail server connects the above-mentioned E-mail incoming call notice service with the same host computer, This host computer connects with a public telephone network, and the pager center is further connected to this public telephone network, It is indispensable for said mail servers to be possible for transmission and reception of an E-mail through said host computer, and for said host computer to be able to call a pager through a pager center.

[0011]Therefore, when mail servers are connected without passing a host computer like the above-mentioned, E-mail incoming call notice service cannot be used. Since the above-mentioned E-mail incoming call notice service is not sorting out the E-mail which should notify mail arrival, the arrival of an urgent E-mail and the arrival of an un-sudden E-mail are treated similarly, and completely perform the notice same in any case, for example. Therefore, in the situation where it is waiting for the incoming call notice of the urgent E-mail by a pager at the time of going out, etc., it will trouble by an unnecessary incoming call notice. In the above-mentioned E-mail incoming call notice service, there is no method besides changing the report destination set as the host computer 509 for every time zone and it is troublesome to a different report destination according to a time zone to carry out an incoming call notice.

[0012]This invention is made so that it may develop the above-mentioned conventional communications system, for example, about an E-mail incoming call notice. The execution condition of the processing which should be performed for every receiving set as it said that it notified to a pager only when a predetermined keyword is contained in the E-mail which received a message is set up, Only when an incoming message agrees in an execution condition, it aims at offer of the message processing method and Message Handling system which perform processing. The time zone is set up as an execution condition of the processing which should be performed for every receiving set, and it aims at offer of the message processing method and Message Handling system which perform processing set as the time zone when the time which received the message belongs.

[Translation done.]

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MEANS

[Means for Solving the Problem]When a message processing method concerning the 1st invention matches an execution condition of said processing based on the contents of processing which should be performed, and the incoming message, or a receiving condition of a message for every receiving set, and sets it up beforehand and said message is received, When it distinguishes and agreed [whether it agrees in an execution condition set as a receiving set with which a receiving set of this message was identified and the contents of the incoming message or a receiving condition of a message was identified, and] and distinguishes, processing matched with the execution condition is performed.

[0014]When a message processing method concerning the 2nd invention matches processing and a keyword which should be performed for every receiving set, and sets them up beforehand and a message is received, When it distinguishes and included whether a keyword which identifies a receiving set of this message and has been set as an identified receiving set would be contained in said message and distinguishes, processing matched with the keyword is performed.

[0015]When a message processing method concerning the 3rd invention matches processing and a time zone which should be performed for every receiving set, and sets them up beforehand and a message is received, Processing which is matched and has been set as a time zone when said receipt time which judges the receipt time of this message, identifies a receiving set of this message, and has been set as an identified receiving set belongs is performed.

[0016]In a method of an E-mail disposal method concerning the 4th invention performing processing set up beforehand according to reception of an E-mail which specified a server, When an execution condition of said processing based on the contents of processing which should be performed, and the received electronic mail, or a receiving condition of an E-mail is matched for every server, it sets up beforehand and said E-mail is received, When it distinguishes and agreed [whether it agrees in an execution condition set as a server from which a server which received this E-mail was discriminated, and the contents of the received electronic mail or a receiving condition of an E-mail was discriminated, and] and distinguishes, processing matched with the execution condition is performed.

[0017]A rewritable memory measure which a Message Handling system concerning the 5th invention matches an execution condition of said processing based on the contents of processing which should be performed for every receiving set, and the incoming message, or a receiving condition of a message, and is

memorized, A means to distinguish whether it agrees in an execution condition which is matched with a means to identify a receiving set specified as an incoming message, and a receiving set, with which the contents of the incoming message or a receiving condition of a message was identified, and has been memorized to said memory measure, When it agreed and distinguishes, it has a means to perform processing matched with the execution condition.

[0018]A rewritable memory measure which a Message Handling system concerning the 6th invention matches processing and a keyword which should be performed for every receiving set, and is memorized, A means to distinguish whether a means to identify a receiving set specified as an incoming message, and a keyword which is matched with an identified receiving set and has been memorized to said memory measure are contained in said message, When were contained and it distinguishes, it has a means to perform processing matched with the keyword.

[0019]A rewritable memory measure which a Message Handling system concerning the 7th invention matches processing and a time zone which should be performed for every receiving set, and is memorized, A means to judge the receipt time of a message, and a means to identify a receiving set specified as an incoming message, It has a means to identify a time zone which is matched with an identified receiving set and has been memorized to said memory measure and when said receipt time belongs, and a means to perform processing matched with an identified time zone.

[0020]An electronic mail processing system which this invention requires for the 8th invention, It has connected with two or more servers, processing which should be performed for said every server is set up beforehand, and an electronic mail processing system which performs processing beforehand set up according to reception of an E-mail which specified a server inputted from a communications network is characterized by comprising the following:

A rewritable memory measure which matches and memorizes an execution condition of said processing based on the contents of processing which should be performed, and the received electronic mail, or a receiving condition of an E-mail for every server.

A means to identify a server specified as a received electronic mail.

A means to distinguish whether it agrees in an execution condition which is matched with a server from which the contents of the received electronic mail or a receiving condition of an E-mail was discriminated, and has been memorized to said memory measure.

A means to perform processing matched with the execution condition when it agreed and distinguishes.

[0021]Drawing 6 is a key map of message processing of the 1st invention, the 4th invention, the 5th invention, and the 8th invention, and expresses processing which notifies arrival of an E-mail. In a figure, 601 and 602 are servers which transmit and receive an E-mail. The server 602 and client 604,604 -- constitute an electronic mail system concerning this invention. The script data base 603 which makes a script as an execution condition of processing which is matched and is set as client 604,604 -- which received an E-mail, and which should be performed memorize is formed in the server 602. A script is inputted by an input means which the server 602 does not illustrate with an operator. The server 602 has connected with the private branch exchange 606. The private branch exchange 606 is connected with a public telephone network which is not illustrated. The pager center 607 and the telephone 608 are

connected to a public telephone network. The pager 605 is called from the pager center 607. The telephone 608 is provided with a lamp turned on by arrival of a telephone.

[0022]A case where a keyword which matched processing by message processing of the 2nd invention and the 6th invention with below is used as a script is explained. Singing of the pager 605 is carried out for conditions (script) which perform processing which should be performed and this processing in the client 604 which is a receiving set here, respectively, When an E-mail addressed to client 604 which includes "Fukuyama" in a transmitting person name of a header unit of processing which extracts a title of an E-mail which received a message from a header unit of an E-mail, and is displayed on a display of the pager 605, and an E-mail receives a message in the server 602, [*****] It shall be set as the script data base 603.

[0023]When an E-mail is transmitted to the client 604 from the server 601 and the server 602 receives this E-mail, the server 602 distinguishes whether "Fukuyama" is included in a sending person of an E-mail who received. When were contained and it distinguishes, the pager 605 is called, a title of this E-mail is transmitted to the pager 605, and it is made to display on that display. Those who carry the pager 605 can know arrival of an E-mail by singing of the pager 605, and can know a title of an E-mail which looked at a display of a display of the pager 605 and received a message. A pager is not called when "Fukuyama" is not included in a transmitting person name.

[0024]Even if an addressee of an E-mail is a case where a power supply of a client which should receive an E-mail is come by off, by making an E-mail and a pager cooperate like the above-mentioned, arrival of an E-mail corresponding to desired conditions can be immediately known by a pager. Since an E-mail from "Fukuyama" is urgent, it desires that incoming call notice, for example, but as for this E-mail incoming call notice processing, it is effective that an incoming call notice is carried out by an E-mail from other persons, when it does not wish.

[0025]There is an advantage that the above-mentioned E-mail incoming call notice processing does not need a host computer which was performing a call of a pager in the conventional communications system by making so that a server may call a pager.

[0026]Next, a case where a script by message processing of the 3rd invention and the 7th invention which matched processing for every time zone is used is explained. Inside of office hours at 9:00 to 17:00 carries the pager 607 here, A case where those who are present in a place where the telephone 608 is in off-duty [after 17:00] get to know arrival of an E-mail addressed to client 604 is assumed, If a time zone will be from 9:00 at 17:00, the pager 607 will be called, and if a time zone will be from 17:00 at 9:00, it shall have set up making a lamp of the telephone 608 turn on. When an E-mail is transmitted to the client 604 from the server 601 and the server 602 receives this E-mail, the server 602 judges the receipt time and identifies a time zone when this receipt time belongs. If an identified time zone is among office hours, a pager will be called and arrival of an E-mail will be notified. If an identified time zone is off-duty, a lamp of the telephone 608 will be made to turn on and arrival of an E-mail will be notified.

[0027]Since processing which is different for every time zone to arrival of an E-mail as mentioned above can be performed, in a situation of changing processing which should be performed according to a time zone, it is effective.

[0028]

[Embodiment of the Invention]Drawing 1 is a block diagram of the electronic mail system concerning this

invention. In a figure, 101 is a server of LAN built within the enclosure of a building. The functional block diagram has shown the principal part of the server 101. The script data base 102 memorizes the contents of the service provided by this electronic mail system and these contents, and the execution condition of said service to which it was made to correspond. It is distinguished whether the script engine 103 is a main control part of this electronic mail system, a message is received, and the message which received corresponds to the execution condition of the processing set as the script data base 102, When it corresponded and distinguishes, the instructions which perform the processing are generated and it outputs to the execution means which performs the processing.

[0029]To the server 101, via a public telephone network further. The transceiver person Management Department 106 which manages the information about the sending person and addressee of the library 105 and an E-mail who memorize the document shared between the mail server of the connected exterior, the mail server 104 which performs transfer of an E-mail, and the client linked to the same LAN is formed.

[0030]Information, including the licence etc. of services, such as a registered user name which serves as a sending person or an addressee, a registered user's telephone number, a registered user's facsimile number, a registered user's pager number, and E-mail incoming call notice processing, makes the transceiver person Management Department 106 have memorized, Reference has made it possible from the script engine 103 or the mail server 104 grade.

[0031].When transmitting to a facsimile the private branch exchange control section 107 and E-mail which control the below-mentioned private branch exchange 117 to the server 101. The pager server 109 which performs the facsimile gateway 108 for receiving ***** and a facsimile signal as an E-mail and the call of a pager is formed. The server 101 has the function to refer for the telephone number of the registered user registered into the transceiver person Management Department 106 from the client 111,112,113 which has been connected to LAN110 and has similarly been connected to LAN110. The client 112 and the telephone 114 are connected with the private branch exchange 117 via the modem 115 for carrying out auto dialing from the client 112. Direct continuation of the telephone 116 is carried out to the private branch exchange 117.

[0032]The server 101 has connected with the communication control unit 118 which receives the arrival of a telephone. The communication control unit 118 is connected with the private branch exchange 117. The private branch exchange 117 is connected with the public telephone network 119. The mail servers 120, --, 120, the telephones 121, --, 121, the facsimiles 122, --, 122, and the pager center that is not illustrated are connected to the public telephone network 119. The pagers 123, --, 123 are called by radio from the pager center which is not illustrated.

[0033]Next, an example of the cooperation service which the above-mentioned electronic mail system provides is explained based on drawing 1. When the contents of the E-mail or the receiving condition of an E-mail received when an E-mail received a message in the mail server 104 fulfills the conditions set as the script data base 102, E-mail incoming call notice service, It is the service which reports that it matched with conditions beforehand and the E-mail received a message using the predetermined means to the set-up report destination. Table 1 is a table showing the event message published when an example of the received header of an E-mail and its E-mail are received. As shown in Table 1, a transmitting person name, an addressee name, a transmission date, a priority, sensitivity, and a title are describing sequentially from

the head at the header of the E-mail. Each field of an event message corresponds with each item of the header of an E-mail, and stores the information.

[0034]

[Table 1]

【表 1】

“福山訓行”					
福山訓行 送信者名フィールド (64バイト)					
“勝山恒男”					
勝山恒男 受信者名フィールド (64バイト)					
“19”	“95”	“10”	“20”	“15”	“20”
1995年10月20日15時20分 送信日時フィールド					2 至急 優先度フィールド
1		“明日の会議時間変更”			
普通 秘密度フィールド		明日の会議時間変更 題名フィールド (64バイト)			

[0035]Drawing 2 is a chart showing an example of the script stored in the script data base 102. As shown in drawing 2, a script number, a receiving set, an execution condition, and the processing that should be performed are describing sequentially from the head.

[0036]The script of No. 1 calls the predetermined pager 123, and notifies the processing which should be performed when setting an execution condition that "Fukuyama" is included in the transmitting person name of the E-mail which received a message in the client 111 and fulfilling this condition, and. The title information on this E-mail is copied by macro processing, and it has set to displaying on the display of the pager 123. The script of No. 2 calls the predetermined pager 123, and notifies the processing which should be performed when setting an execution condition that "Yamamoto" is included in the transmitting person name of the E-mail which received a message in the client 111 and fulfilling this condition, and. It asks for that sending person's extension number by macro processing from the transmitting person name information on this E-mail, and has set to displaying on the display of the pager 123.

[0037]Each of two macro processings mentioned above is for specifying a notice content, It is a conversion broad view which pulls out and uses the contents of the predetermined field of the copy broad view which copies the contents of the predetermined field of an event message, respectively, and an event message, and corresponding information from other databases (here transceiver person Management Department 106).

[0038]The script of No. 3 is set to setting an execution condition that the mail arrival time of the E-mail which received a message in the client 112 is from 9:00 to 17:00, calling the predetermined pager 123 for the processing which should be performed when fulfilling this condition, and notifying the arrival of an E-mail by a fixed form sentence. If the script of No. 4 calls the predetermined telephone 121 and the processing which

should be performed when the mail arrival time of the E-mail which received a message in the client 112 determines that an execution condition is during 9:00 of the next day from 17:00 and it fulfills this condition is notified, it shall be set up.

[0039]Since it constitutes so that the flag information which shows whether they are the item number information, the data length information for every item, and macro processing may be described in these scripts and each item may moreover be identified based on these information, the number of items and data length which can be set up are variable.

[0040]Drawing 3 is a flow chart which shows the procedure of the above-mentioned E-mail incoming call notice processing. Here, according to the script of No. 1 and No. 2, E-mail incoming call notice processing addressed to client 111 shall be performed. When the E-mail shown in Table 1 receives a message in the mail server 104, the script engine 103 specifies a receiving set with the client 111 from the addressee name of an E-mail (S201). The above-mentioned script which is matched with this client 111 and has been set up beforehand is read from the script data base 102 (S202). And since it distinguishes whether "Fukuyama" or "Yamamoto" is included in the transmitting person name of an E-mail according to the read script (S203) and corresponds to "Fukuyama" of the script of No. 1 in this case, notice of title macroscopic processing which should be performed when fulfilling this condition is performed (S204). That is, call the predetermined pager 123 and the arrival of an E-mail is notified, and a title "tomorrow's conference time change" is incorporated from the header of an E-mail, and it transmits to the pager 123, and is made to display on the display. The pager 123 is not called, when "Fukuyama" and "Yamamoto" were not included in S203 and it distinguishes.

[0041]Drawing 4 is a flow chart which shows the procedure of execution of the processing specified as the script in S204. Based on flag information, it is distinguished first whether the target processing is macro processing (S701). When it is macro processing, it is distinguished whether the kind is a copy broad view or it is a conversion broad view (S702). When it is a copy broad view, it copies to the notice content field of the service message for ordering it execution of processing of the contents of the predetermined field of an event message (S703). And when distinguish (S704) and there is [whether there are any other target processings and] nothing, a service message is published and processing is performed (S705). When there were the other target processings in S704 and it distinguishes, processing is returned to S701 and subsequent procedure is repeated. When it was not macro processing in S701 and distinguishes, processing is shifted to S704. When it distinguishes that it is a conversion broad view in S702, With reference to the contents of the predetermined field of an event message, this and corresponding information are pulled out from the transceiver person Management Department 106, and it is considered as the message which should notify this information (conversion), and stores in the notice content field of a service message (S706). And processing is shifted to S704.

[0042]When an E-mail receives a message, in the client 111, the same incoming call notice as usual is performed. That is, when the power supply of the client 111 is one, an incoming call notice is performed promptly, and the arrival is notified, when a power supply is OFF and the power supply of the client 111 is made one next time.

[0043]Drawing 5 is a flow chart which shows other procedure of the above-mentioned E-mail incoming call notice processing. Here, according to the script of No. 3 and No. 4 of drawing 2 mentioned above, E-mail

incoming call notice processing addressed to client 112 shall be performed. When the E-mail shown in Table 1 receives a message in the mail server 104, the script engine 103 specifies a receiving set with the client 112 from the addressee name of an E-mail (S301). The above-mentioned script which is matched with this client 112 and has been set up beforehand is read from the script data base 102 (S302). And according to the read script, the mail arrival time of an E-mail is first judged by the clock formed in oneself (S303).

[0044]Next, when are not distinguished and (S304) belonged [whether mail arrival time belongs to the time zone (from 9:00 to 17:00) of the script of No. 3, and] and it distinguishes, it is distinguished whether it belongs to the time zone (9:00 of 17:00 to the next day) of the script of No. 4 (S305). When mail arrival time belongs to the time zone of the script of No. 4, call the telephone 121, a lamp is made to turn on and the arrival of an E-mail is notified (S307).

[0045]When mail arrival time belonged to the time zone of the script of No. 3 in S304 and it distinguishes, the pager 123 is called and the arrival of an E-mail is notified (S306). Although it is not possible to distinguish if mail arrival time does not belong to the time zone of the script of No. 4 by S305 in this example, when there is nothing that agrees in the conditions of all the scripts temporarily, it does not perform calling the pager 123 or the telephone 121.

[0046]When an E-mail receives a message, in the client 112, the same incoming call notice as usual is performed. That is, when the power supply of the client 112 is one, an incoming call notice is performed promptly, and the arrival is notified, when a power supply is OFF and the power supply of the client 112 is made one next time.

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]It is a block diagram of the electronic mail system concerning this invention.

[Drawing 2]It is a chart showing an example of the script concerning this invention.

[Drawing 3]It is a flow chart which shows the procedure of the message processing concerning this invention.

[Drawing 4]It is a flow chart which shows the procedure of execution of the processing specified as the script.

[Drawing 5]It is a flow chart which shows the procedure of the message processing concerning this invention.

[Drawing 6]It is a key map of the message processing concerning this invention.

[Drawing 7]It is a system configuration figure of the conventional communications system.

[Drawing 8]It is a key map of the conventional electronic mail system.

[Description of Notations]

102 Script data base

103 Script engine

104,120 Mail server

109 Pager server

123 Pager

[Translation done.]

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DRAWINGS

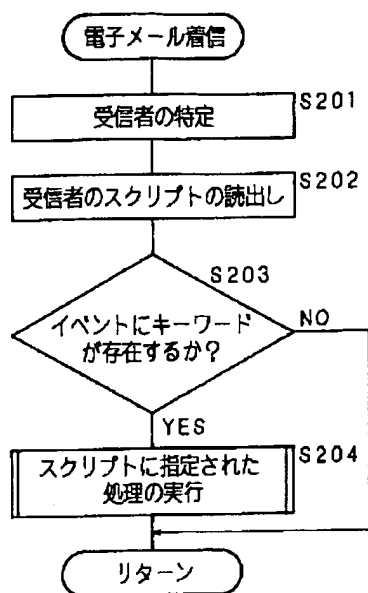
[Drawing 2]

本発明に係るスクリプトの一例を示す図表

番号	受信装置	実行条件	処 理
1	クライアアント111	送信者名→* 福山 *	通知先 →035051XXXX (ポケットベル) 通知内容→題名(マクロ処理)
2		送信者名→* 山本 *	通知先 →035051XXXX (ポケットベル) 通知内容→内線番号(マクロ処理)
3	クライアアント112	時間帯→9時~17時	通知先 →035051XXXX (ポケットベル) 通知内容→定型文
4		時間帯→17時~9時	通知先 →078934XXXX (電話) 通知内容→ランプ点灯
5	クライアアント113	題名→* 会議 *	通知先 →078934XXXX (電話) 通知内容→ランプ点灯

[Drawing 3]

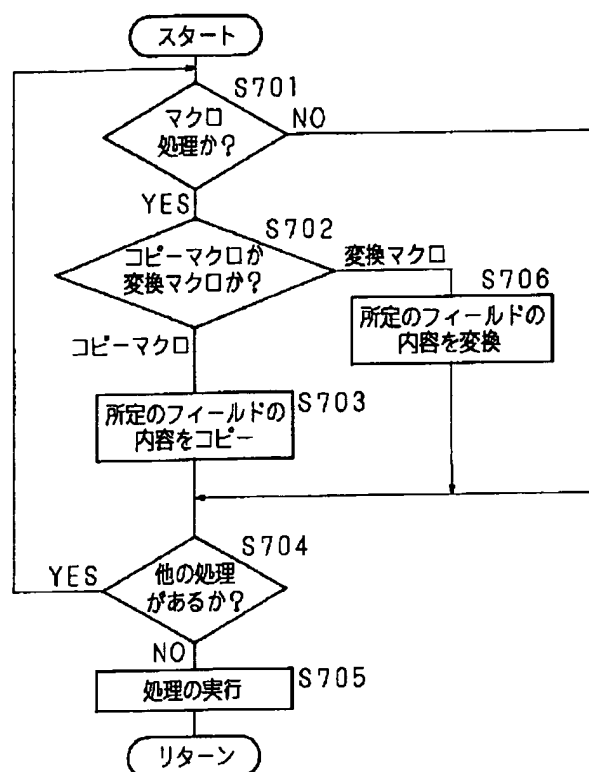
[Drawing 1]



[Drawing 1]

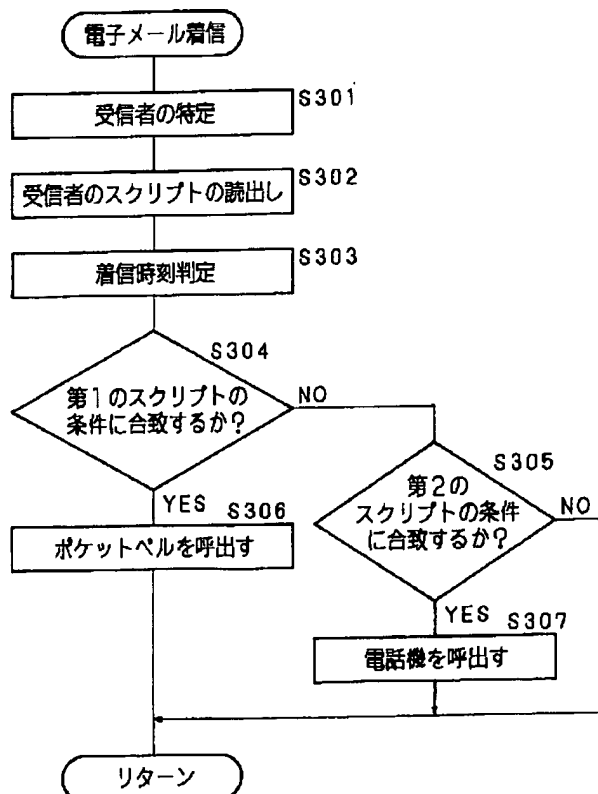
[Drawing 4]

スクリプトに指定された処理の実行の処理手順を示すフローチャート



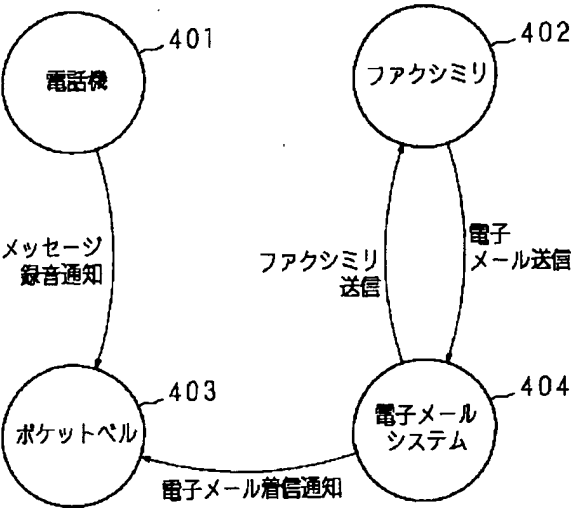
[Drawing 5]

本発明に係るメッセージ処理の処理手順を示すフローチャート

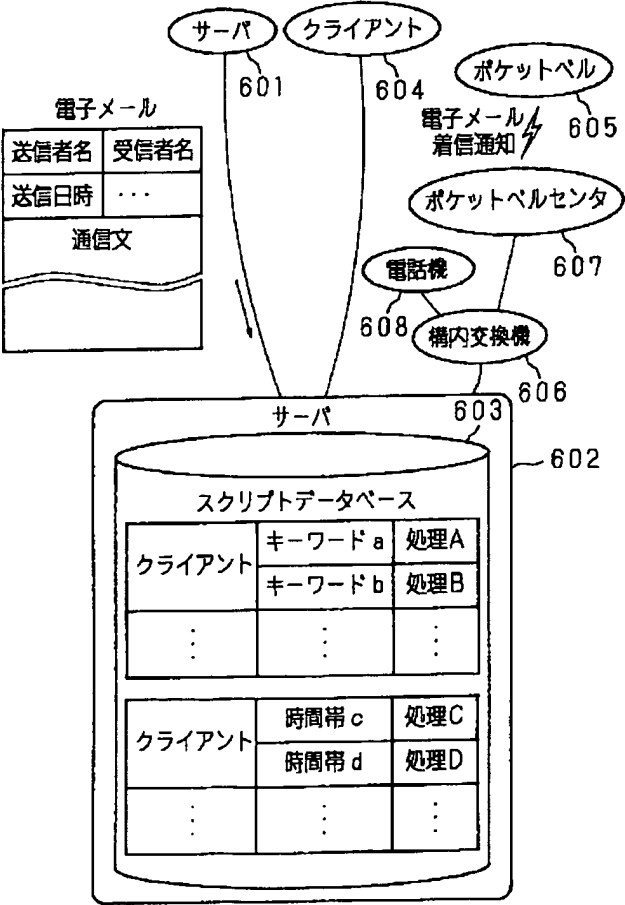


[Drawing 7]

従来の通信システムのシステム構成図

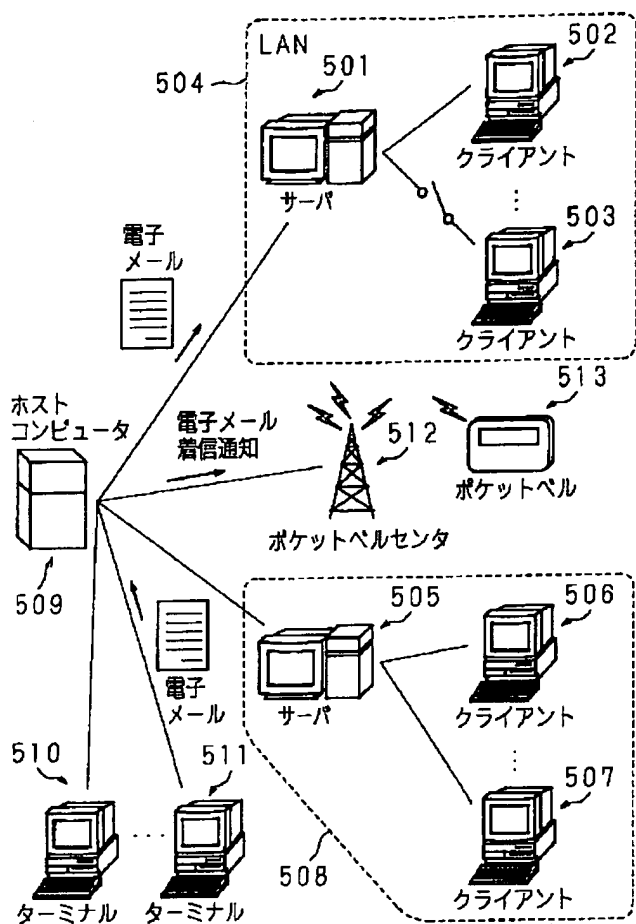


[Drawing 6]
本発明に係るメッセージ処理の概念図



[Drawing 8]

従来の電子メールシステムの概念図



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CORRECTION OR AMENDMENT

[Kind of official gazette] Printing of amendment by the regulation of 2 of Article 17 of Patent Law
 [Section classification] The 3rd classification of the part VI gate
 [Publication date] February 16 (2001.2.16), Heisei 13

[Publication No.] JP,9-223087,A
 [Date of Publication] August 26, Heisei 9 (1997.8.26)
 [Annual volume number] Publication of patent applications 9-2231
 [Application number] Japanese Patent Application No. 8-256834
 [The 7th edition of International Patent Classification]

G06F 13/00 351

G05B 15/02

H04L 12/54

12/58

[FI]

G06F 13/00 351 G

G05B 15/02 A

H04L 11/20 101 B

[Written amendment]

[Filing date] October 13 (1999.10.13), Heisei 11

[Amendment 1]

[Document to be Amended] Specification

[Item(s) to be Amended] Claim

[Method of Amendment] Change

[Proposed Amendment]

[Claim(s)]

[Claim 1]In how to perform processing set up beforehand according to reception of a message which specified a receiving set,

When an execution condition of said processing based on the contents of processing which should be performed, and the incoming message, or a receiving condition of a message is matched for every receiving set, it sets up beforehand and said message is received, A message processing method performing processing matched with the execution condition when it distinguishes and agreed [whether it agrees in an execution condition set as a receiving set with which a receiving set of this message was identified and the contents of the incoming message or a receiving condition of a message was identified, and] and distinguishes.

[Claim 2]In how to perform processing set up beforehand according to reception of a message which specified a receiving set,

When processing and a keyword which should be performed are matched for every receiving set, it sets up beforehand and a message is received, A message processing method performing processing matched with the keyword when it distinguishes and included whether a keyword which identifies a receiving set of this message and has been set as an identified receiving set would be contained in said message and distinguishes.

[Claim 3]In how to perform processing set up beforehand according to reception of a message which specified a receiving set,

When processing and a time zone which should be performed are matched for every receiving set, it sets up beforehand and a message is received, A message processing method performing processing which is matched and has been set as a time zone when said receipt time which judges the receipt time of this message, identifies a receiving set of this message, and has been set as an identified receiving set belongs.

[Claim 4]In how to perform processing set up beforehand according to reception of an E-mail which specified a server,